

1595
Biography

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CASSELL'S
ROMANCE OF
FAMOUS LIVES

NAWAB SALAR JUNG BAHADUR.

MONTEZUMA A HOSTAGE IN CORTES' HANDS



NAWAB SALAR JUNG BAHADUR.

The reports that had reached Cortes of the immense wealth of the empire over which Montezuma the Aztec ruler bore sway had inflamed his ambition and in his conquest of Mexico the Spanish adventurer acted with remarkable boldness and address. After having been received with great pomp by Montezuma, Cortes forthwith proceeded to install himself in one of the splendid palaces of the capital. He then repaired to the emperor's palace, possessed himself of the person of the monarch, and had him conveyed to the Spanish quarters, where he was kept as a hostage.

CASSELL'S
ROMANCE OF
FAMOUS LIVES

EDITED BY
HAROLD WHEELER



THE SIGN OF A GOOD BOOK

VOLUME THREE

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A STEEL PROCESS *that* TRANSFORMED INDUSTRY

Sir Henry Bessemer, Who, by One Invention Saved the Revenue Vast Sums, and by Another Obtained Funds to Perfect a Third, His World-famed Steel Process

STEEL to-day is by far the most important material used by the engineer. Bridges, machines, locomotives, giant ocean-going ships—all require steel. Yet not so very long ago steel was both costly to manufacture and unreliable to use. Our grandfathers used iron, where we use steel; and had not Henry Bessemer discovered a method whereby iron could be transformed both economically and quickly into reliable steel, we should in all probability still be using iron to-day. In a word Henry Bessemer was the father of the "steel

by his inquisitiveness, yet they were all very fond of him, and smilingly answered all his inquiries.

Apart from the time spent in acquiring an elementary education, Bessemer remained in the workshops. He soon proved that he had inherited all his father's skill and mechanical ability. Anthony Bessemer was proud of his son, who delighted in nothing but machinery

and engineering, and gave him every encouragement to develop his natural inclinations.

By 1830 Henry had learned all that either the Charlton factory or his father could teach him, and he was anxious for a larger sphere in which to work. Accordingly, although he was but seventeen years old, he came to London and set up in business on his own account.

His first venture was connected with the casting of art-work in white metal. From his experience in the type-foundry he had gathered much information about easily fusible alloys, and, turning this to good account, he was soon engaged in the production of white metal replicas of well-known statues. Nor did he disdain to cast such

trifles as trinket boxes. The excellence of his work attracted attention, and before he had been in business a year, he was showing pieces at the exhibitions of the Royal Academy.

From his father Bessemer had inherited great skill both as a draughtsman and a die-sinker. Armed with these two accomplishments, he began to turn out all sorts of embossed metals, leathers, and fabrics. This branch of his activities flourished no less than the metal-casting, so that, at an age when many boys are only about to leave school, Henry Bessemer was already a prosperous manufacturer in a small way. Moreover, he had made his mark entirely through his own initiative and the excellence of his work.

AN INDUSTRIAL MAGICIAN



Although Sir Henry Bessemer is best remembered for his process that enabled steel to be produced in bulk at a low cost, he made other contributions to industrial progress.

Anthony Bessemer, the father of the great engineer, was a most skilful and prosperous man. Born in the City of London, of Huguenot stock, he enjoyed very considerable success as an engineer both in Holland and France. The French Revolution, however, reduced him to complete poverty, and he returned to England, having narrowly escaped with his life. Settling down in the Hertfordshire village of Charlton, Anthony Bessemer set to work to rebuild his fortunes by hard work. He set up a small factory for the manufacture

of gold chains, but subsequently abandoned this for the far more profitable trade of type-founding. In this latter enterprise he worked in conjunction with William Caslon, a member of the famous family of type-founders.

Henry Bessemer was born into this atmosphere of manufacture on the 19th January, 1813. Charlton was then a very secluded and inaccessible village, and the child Bessemer knew no better or more delightful way of passing his days than in wandering round his father's workshops, asking innumerable questions, interfering when he ought not to have done, and generally behaving just as any other intelligent child would if given the run of a factory. He nearly worried the workmen out of their lives

Through the art exhibitions held there, Bessemer came into touch with the officials of Somerset House. One day he heard one of them commenting on the frauds which unscrupulous people were able to perpetrate by the repeated use of the stamps affixed to deeds. Bessemer began to devise a means for preventing such malpractices. For a month or more various projects kept revolving in his mind, and ultimately he produced his first important invention—a perforated die, which enabled a date to be impressed indelibly on every stamp.

Gives Invention to the Government

His friends at Somerset House were delighted, and the invention was taken up officially. With great generosity Bessemer refused to accept remuneration for his invention. At the time he was promised an official appointment in recognition of his services, but, although he prevented frauds amounting annually to about £100,000, the promise was never fulfilled.

Disgusted by this treatment, Bessemer turned his attention to other fields, and in 1833 he patented the first plumbago pencil. Till that year what is now called a "lead" pencil was unknown. The superiority of Bessemer's new pencils immediately appealed to the public, and, since he could buy plumbago waste for their manufacture very cheaply, Bessemer reaped a handsome income from this source. Nevertheless, his active mind soon tired of pencil manufacture, and, disposing of his interests to some more plodding and humdrum individual, he turned his attention to his father's trade of type-founding.

This sequence of invention, rapid exploitation, and final disposal to another marked Bessemer's career through all his life. Although he amassed great wealth, he did so accidentally. Money for its own sake never interested him to any extent. Occupation for his restless inventive mind was the thing for which he craved, and unless his mind were busy grappling with a problem he was never happy.

Type-composing and Embossed Velvet

As a type-founder Bessemer quickly turned his attention to improvements. He tried casting type under pressure, to procure a sharper outline in the finished letters. By 1838 he had invented the first type-composing machine, the ancestor of the modern linotype. By aid of this he could set 5,000 types an hour, in that day a prodigious number. Type-founding alone did not prove sufficient to absorb his entire energies, so he spent his spare time in producing a process for making embossed velvet. He not only invented the process, but also designed all the machinery required, and even engraved the embossing rolls with his own hands.

When he entered the trade the price paid

by the velvet manufacturer to the embosser was six shillings per yard. After he had used his new machinery for a year or two this price had fallen to twopence. Bessemer then abandoned the industry.

This venture was typical of many. He would enter a new field of manufacture, examine its methods, scrap them, substitute better ones of his own invention, revolutionize the prices ruling in the market by his competition, and then relinquish the whole thing because it no longer interested him. Industrialists hoped and prayed that Henry Bessemer would not turn his attention to their special branch of trade—his improvements were so disturbing and so shattering.

Gold and Bronze Powder

Between 1840 and 1850 Bessemer engaged successfully in two or three new ventures. He considered the question of the manufacture of gold and bronze powder. The secret of these preparations had been known in China and Japan for many centuries, and they had been cleverly imitated in Germany. In 1840 the price of such powders and the paints made from them was as much as £5 10s. a pound.

For a long time Bessemer, try as hard as he could, found himself unable to discover the secret of the German process. All his early productions compared unfavourably with the powders then on the market. Initial failure, however, only served to increase his determination, and he vowed he would not be beaten by a bronze powder.

At last he found the secret, and a plant was organized to exploit it. The secret of the new process was entrusted only to a few of Bessemer's relatives, whom he put in to manage the new factory. For nearly forty years these works continued active, during which time the price of the powder fell from £4 (the original price at which it was placed on the market) to half-a-crown a pound.

It was on the outbreak of the Crimean War that Bessemer first turned his mind to the manufacture of steel, a branch of industry which was destined to absorb most of his attention until he died. Early in the campaign the defects of the British artillery became a subject for critical comment at home, and Bessemer began to think out improvements in the design and manufacture of cannon.

Apathy of War Office

The British War Office, was totally adverse to considering any suggested improvements. Napoleon III, however, heard of Bessemer's proposals, and invited him to Vincennes in order to discuss them.

Arrived in France, Bessemer conclusively proved, by a series of rather alarming experi-

ments, that the materials then available for gun-making were not nearly strong enough. Having blown several pieces of artillery to pieces, he returned to England eager to find some stronger material, which Napoleon promised to adopt when it should be discovered. First of all, he started to experiment upon a mixture of pig-iron and steel fused together. This new metal, patented in 1855, seemed just what was needed. To begin with, however, cannon made from it seemed to burst just as easily as the kind then ordinarily in use. Having demonstrated this to his own satisfaction, Bessemer turned once more to his researches.

One day, shortly after this setback, Bessemer was melting pig-iron in a reverberatory furnace, when he noticed some pieces, which, although exposed to the air-blast of the furnace (and consequently in its hottest part), remained unmelted in spite of the tremendous heat. He quickly seized a long pair of tongs and took these pieces of iron out of the furnace. On examination they turned out to be mere shells of wholly decarbonized iron. The carbon, which makes iron brittle, had been completely burnt out of them by means of the air-blast.

Bessemer realized that by some similar means pig-iron might be freed of the carbon it contained, and ultimately be turned into steel. (Steel actually consists only of purified iron, containing about 1 per cent. of carbon, and a similar small amount of some other metal added in order to impart special toughness and elasticity.) Clearly if the excessive carbon, which is the cause of weakness in iron, could thus be removed, Bessemer could at once set out on the manufacture of high-grade steel at a low cost. With his mind teeming with such thoughts as these, and excited at finding himself on the very brink of a momentous discovery, he worked at high pressure to render this new idea practicable.

Bessemer took out his second steel patent on the 17th October, 1855. The specification

described a method for "forcing currents of air or of steam . . . into and among the particles of molten crude iron . . . or of remelted . . . or refined iron, until the metal so treated is thereby rendered malleable and has acquired other properties common to cast steel, and still retaining the fluid state of such metal, and pouring or running the same into moulds."

This odd and curiously cumbersome sentence is interesting in that it describes for the first time the method by which cheap steel was soon to become easily available. It sounds the knell of the iron age and ushers in the steel age.

WHERE IRON ORE IS REDUCED TO MOLTEN METAL



In this battery of blast-furnaces the furnaces are seen rising from the shed. The inclined tracks on the left deliver the ore and fuel into the furnaces. On the right are dust-catchers and also the stoves for heating the air used in the furnaces.

This patent went on to describe a furnace capacious enough to contain a number of large crucibles. Into these molten pig-iron was run from a blast-furnace, and to the bottom of each reached a pipe, through which air and steam under pressure might be blown. This furnace was only the first step forward.

It answered its purpose, but proved very difficult to manage in practice, and also sadly uneconomical. No one could tell exactly when enough air had been blown through the molten iron to remove all its impurities. The process was frequently carried on too long, with the result that iron oxide was formed, and this, remaining in the steel when it was finally cast, rendered it brittle and totally unreliable.

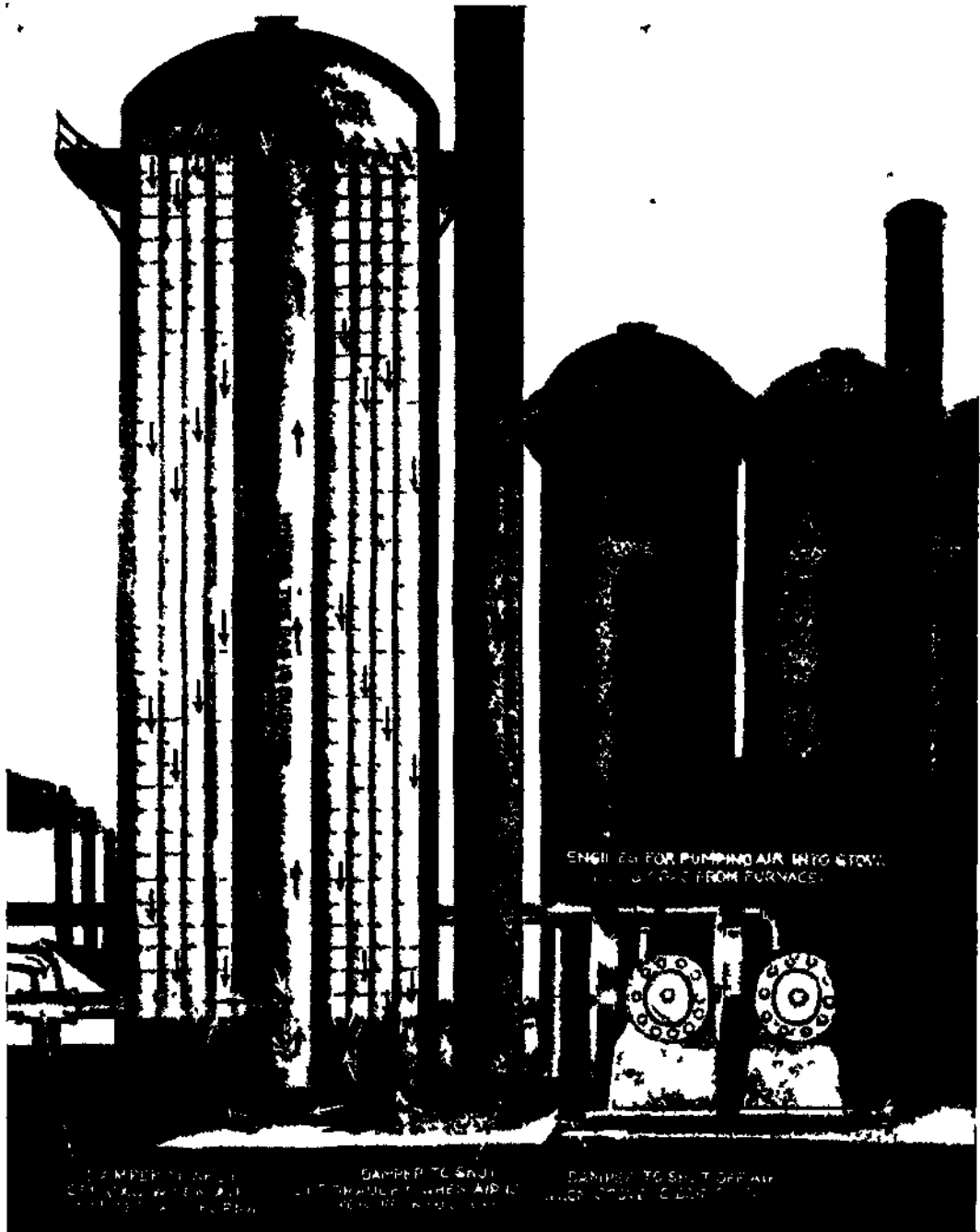
HOW A BLAST-FURNACE IS CONTINUALLY-



Sir Henry Bessemer revolutionized steel-making by revolutionizing the plant of the furnace. He introduced a current of such intensity that it burnt out the carbon by the combustion of the impurities in the iron ore. In days gone by the air was sometimes obtained by working a pair of bellows, and the output was, in consequence, very much smaller than that obtained by present-day machinery. In this drawing a blast-furnace is shown as though it had been cut in two from top to bottom. It is simply a wide chimney, lined with fire-brick. Coke, iron ore, and limestone are brought up the inclined track and dropped in alternate layers through the door at the top. When melted, the limestone and the impurities in the ore combine to form slag, and both the slag and the iron sink to the bottom of the furnace. The slag, being lighter, floats on top of the molten iron, and both are drawn off at intervals through the drain-pipes. The necessary ingredients are fed in constantly, in order to keep the furnace in continuous operation. So that no heat may be wasted, the furnace is supplied with heated air. The air supply and exhaust system which do this are explained and illustrated on the next page.

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—FED AND SUPPLIED WITH HEATED AIR



It takes several huge stoves to supply heated air for the blast-furnace. One of these is shown in cross-section above. A central flue opens into a chamber on top, and from this chamber channels lead through fire-brick to another chamber at the bottom. At first hot gases from the furnace, represented by black arrows, enter the central flue, rise, and pass down through the side channels, heating the fire-brick. At the bottom they discharge through a chimney. Then dampers close the chimney and shut off the gas as shown, and air, represented by white arrows, is pumped the other way by the engines at the right. It is heated in the side channels, passes down the central flue, and enters the bottom of the blast-furnace. Meanwhile the hot gases are heating another stove. Once the furnace has been 'blown in' or started, it is necessary that it should continue its work uninterruptedly, as cooling or 'freezing' destroys the whole of the fire-brick lining, which can only be restored at great expense. The largest blast-furnaces in England produce as much as 5,000 tons of pig-iron in the course of a week, and it is probable that this rate will soon be increased. (*Reproduced from 'Casell's Children's Book of Knowledge'*)

For biographies not included in the Groups see detailed Index



No sooner had this patent been granted than Bessemer set to work thinking out improvements upon it, and to such good purpose that a third patent was taken out on the 7th December, 1855. This, the now famous and familiar Bessemer converter, was a great steel vessel, not unlike a vast melon in shape, which was supported on trunnions and provided with a thick lining of fire-clay. (This melon-shaped converter is by no means universally used, as many fixed cylindrical furnaces have been constructed to carry out the Bessemer process of steel manufacture).

Decides Upon the Shape

Finally, after much experimenting, Bessemer concluded that a pear-shaped or bottle-shaped vessel best suited his purpose, as less heat was wasted, and less splashing about of molten white-hot steel took place in converters of this kind. Round the bottom of the converter were fixed several air passages ("tuyères"), by means of which a blast of compressed air could be forced through the molten mass of iron.

The mode of operation of this converter was as follows. First, a charge of about one ton of pig-iron was run into the converter through its wide neck. Then the air-blast was turned on, and the molten mass was soon "boiling," owing to the passage of the air through it.

As it passed through the metal, the oxygen in the air combined with any such impurities as sulphur, or carbon, or silicon (which are invariably present in pig-iron), and converted them into their oxides. These oxides were either volatilized and carried away in the air-blast, or else were absorbed by the fire-brick lining of the converter itself. Since all oxidations produce a large amount of heat, the converter kept itself hot enough once the air-blast was turned on, and, through thus saving fuel, it proved a most economical machine to operate.

Burning Out the Impurities

Throughout this process of combustion great jets of brilliantly coloured flame shot through the neck of the converter, varying in hue according to the nature of the impurities present in the crude iron. When these flames died down, the operator might know that all the impurities were burnt away and the converter contained only steel. Since the vessel was mounted on trunnions, it could easily be tilted up to allow the molten steel to run off from it.

The success of Bessemer's experiments and of his first converter aroused considerable interest, and he was invited to read a paper before the British Association at Cheltenham in 1856. He delivered an address entitled "On the Manufacture of Malleable Iron and Steel without Fuel," and interest grew to intense enthusiasm. Such was Bessemer's

reputation, moreover, as a practical man of science and an engineer, that, within a month of reading his paper, he had received £27,000 from ironmasters in payment for licences to use his invention.

Having obtained these licences, the ironmasters proceeded to set up converters for themselves, often hurriedly and inefficiently. As a result, they mostly failed to produce satisfactory steel. Enthusiasm for Bessemer, therefore, at once gave way to discredit. A cry arose from the ironmasters that they had been cheated, they had been imposed upon, and that, doubtless, this thing would ruin them. Nothing was too bad to say of Bessemer; he was an object of vituperation to every ironmaster in the country—those who had installed his plant, and those who had not.

Still Room for Improvement

The fact was that the Bessemer process, as it stood, really possessed very little value, though only slight improvements were necessary to eliminate its radical defects. The old trouble still persisted—how was the workman in charge of the operation to know when enough, but not too much, carbon had been removed? To be of any use at all, steel must contain a small quantity of carbon, which imparts a tremendously increased strength and malleability. The Bessemer converter would totally decarbonize iron (a useless feat), but otherwise it could do very little.

The storm of criticism that arose against him did not ruffle Bessemer. He knew that he was still some way from success, and that he had put his patent on the market prematurely, although he dared not acknowledge either fact. Announcing that he would soon track down all the ironmasters' troubles, he began a new series of experiments at his laboratory.

Having backed his invention publicly, and believing in it, as he did, he was the last person to abandon it now. The money which his metallic powders and embossed velvets had brought to him he now spent like water, in order to prove that his invention was not a failure, and that the ironmasters did not know their own business.

A Way Out of His Difficulties

For many months Bessemer toiled away. He invoked the aid of the best scientific brains in the country, and called in the aid of practical working iron and steel makers by the score—all to no purpose. It was not until the end of 1856 that Bessemer found a way out of all his difficulties by adopting an idea originally put forward by a young engineer named Robert Forester Mushet. Mushet's process, which had been patented, consisted in decarbonizing the iron completely, first of all, in a Bessemer

converter, and then adding to the charge the exact amount of carbon necessary to turn it into high-grade steel. The idea is amazingly simple—so simple, indeed, that Bessemer and all his clever assistants never thought of it.

Owing to his failure to pay the requisite fees and to fulfil the needful formalities, Mushet allowed his patent to lapse, and Bessemer acquired it and incorporated it into his own process. He now proceeded to shew the protesting ironmasters how to work their converters according to this new principle, and the newly produced Bessemer steel quickly became popular. The name of Mushet is now all but forgotten. But we should bear in mind that it was Mushet who enabled Bessemer to bring his great invention to perfection. Without Mushet cheap steel would have remained a dream for many more years to come.

Starts a Factory of His Own

Although he had silenced their criticisms, the ironmasters were still extremely hostile to Bessemer and to his invention. To meet this opposition he determined to start as a steel-maker on his own account. In 1859 he built and opened works in Sheffield, where, of course, his converters were installed. For ten years these works were not financially successful, but Bessemer in his usual dogged fashion kept them working at full pressure the whole time. During these years detailed improvements were constantly being patented, although the process did not reach its final pitch of perfection until, in 1879, a method was discovered whereby phosphorus (a most malignant impurity) could be removed in the converter.

Within five years of the completion of Bessemer's invention in 1859, his converter was in use at all the large steel-making centres of the world, and its real value to industry began to be understood. Once he had seen his process fairly launched, Bessemer himself, at his Sheffield works, reverted to the work which had first led him to study the question of steel manufacture, and he was soon busy adapting steel for use in cannon manufacture.

In this he was met by the most determined opposition from trade rivals, who were resolved that he should not capture this branch of their business. In fact, there is no doubt that, but for this stupid opposition, steel would have been used in this country for ordnance quite twenty years sooner than it was. Bessemer

showed beyond doubt that his steel was far more suitable than any other substance for making artillery. Blindness and also prejudice, fomented by his rivals in trade, alone prevented this fact from being generally recognized.

Backed by its inventor's indomitable grit and perseverance, "Bessemer steel" gradually came into general use. Steel boilers for locomotives, then steel railway lines, then steel tyres for locomotives—steel began to be put to one use after another. Steel rails might be

THE BESSEMER CONVERTER IN FULL BLAST



The molten pig-iron is poured into the converter, which is then tilted upright. As the iron flows over the holes in the bottom of the converter, the hot air-blast is turned on and the impurities are consumed.

expensive, but they outlasted three iron ones, so that soon rails were being laid as fast as Bessemer could make the steel for them at Sheffield.

True to his invariable practice, Bessemer quickly started to cut the prices in the steel trade. In 1860 Krupps had charged the fabulous price of £120 per ton for steel tyres. Six years later Bessemer was selling rather better tyres at £40 per ton. In a similar way he reduced the price of steel rails from £25 per ton in 1866 to £12 per ton in 1867. These figures explain why Bessemer continued to be so extremely

unpopular among his fellow manufacturers, for they sent the bottom out of all their markets. Nevertheless, his policy of selling at the cheapest possible price justified itself, for he became later one of the richest men in the country.

As we have seen, Bessemer engaged in many different branches of manufacture. Yet he was totally unlike the typical industrialist. He never kept long to one branch of his various activities, no matter how remunerative the affair in question might be. Most capitalists take a pleasure either in the riches they amass or else in proving themselves model employers, but Bessemer, though he grew to be so wealthy, cared for neither of these things. He loved to solve a problem for its own sake. His restless mind was continually speculating as to whether this or that process might not be improved by this or that innovation.

Why His Career Was so Varied

With an eminently practical man such as Bessemer, to think was to act. No sooner did a problem in industry attract his attention, than he started to solve it by buying or building a plant and entering the industry concerned on his own account. This explains how he came to be connected at one time or another with industries so diverse as type-founding, metallic powder manufacture, ordnance making, embossing velvet, and the general steel industry.

After the year 1870 Bessemer gradually ceased to take much active interest in his steel works. He retired to a life of busy leisure, making his home at Denmark Hill, London, where he erected an observatory. Ingenious

ideas kept running through his head. A sufferer from sea-sickness himself, he invented a swinging saloon for sea-going vessels. In order to test this invention, he built a special vessel, 350 feet long, 54 feet wide, and of 4,000 horsepower. The saloon was hung on trunnions, and its movement was controlled by hydraulic machinery in such a way that, no matter how violently the ship pitched and rolled, the floor of the saloon remained level and steady. The performance of this invention, when tried in a rough sea, did not come up to Bessemer's exactly high standard, and the project was abandoned rather prematurely.

Loaded with Well-earned Honours

In his retirement Bessemer reaped the honours he had earned during his strenuous career. He became a fellow of the Royal Society, was made a freeman of the City of London, and was knighted in 1879, for his services rendered to the Inland Revenue office more than forty years before. Numerous engineering societies and institutes also conferred honours on one who was so great an ornament to their profession, for it was agreed on all hands that the invention of Bessemer steel ranked with the great events that have changed the face of society.

Busy to the last, Bessemer died at Denmark Hill on the 15th March, 1898. He was buried in Norwood cemetery. In 1833 he had married Miss Anne Allen, who died a year before him. He was survived by two sons and a daughter.

[See "Sir Henry Bessemer: an Autobiography" (1905).]

THE FIRST STAGE IN MAKING AN INGOT INTO A RAIL



Only the top roller is movable. At first the rollers are set almost the thickness of the ingot apart. Then, as the ingot passes backwards and forwards, the distance is lessened, until the ingot is sufficiently reduced in thickness to go into the rail-rolling mill. At this stage it is called a "bloom" or "billet."

For biographies not included in the Groups see detailed index

The CONQUEROR of the AZTEC EMPIRE

How Cortes, with His "Frightful Beasts," Overthrew the Powerful Montezuma and His People, and Added a Vast Territory to the Realm of an Ungrateful King

A STRANGELY assorted crowd lined the sunny streets of a Spanish town awaiting the coming of its king. Unobserved among the throng of people stood a man of unkempt appearance, whose lined features and haggard countenance gave him an aged aspect that was not altogether warranted by his years.

Not long before towns and villages throughout the country had been ringing with his praises. His fame had permeated the length and breadth of Spain, had crossed its borders, and penetrated to England and the far-flung outposts of Europe. His name had been on everyone's lips. Now, unrecognized and unhonoured even in his own land, he was jostled to and fro by a street rabble, an object of pity that was akin to contempt.

A deep-throated roar and the sound of prancing hoofs gave the first warning of the king's approach. The crowd pressed forward eagerly, so eagerly that none noticed the old man force his way through suddenly to the front. A careful observer would have noted a glint in his eye that told of a sudden determination, but no one divined his intention until, without warning, he ran forward and jumped on to the slowly moving royal carriage.

King Charles looked surprised, as well he might, at this unheard-of proceeding.

"Who are you?" he demanded angrily.

There was a note of pride in the old man's voice as he answered.

"I am a man," he said, "who has gained you more provinces than your father left you towns."

Unfortunately, the historian to whom we are indebted for this anecdote, does not relate what happened afterwards. It does not, however,

require a vivid imagination to picture the sequel. Doubtless the haughty Spanish monarch gave orders that his impudent subject be cast back into the crowd. But King Charles could not have continued his journey that day with complete equanimity, for the boast of Hernando Cortes was not an idle one.

Forty valuable years of his active life had been devoted to the unselfish service of his country. He had conquered Mexico and had created a

THE CONQUEROR OF MEXICO



The Spanish adventurer, Hernando Cortes, who acquired Mexico for his country. He set out for the land of the Aztecs in the year that Magellan started his voyage round the world.

New Spain beyond the seas. Vast tracts of rich new land in the New World had been added to the Spanish domain through his initiative and resource. He had conferred a lasting benefit on humanity by establishing a European settlement in the newly discovered regions, and had guided its destinies with a wise hand for nine difficult years.

He had encouraged and developed the more important industries of the Mexicans, and with remarkable patience and fervour had tried to teach the natives to put aside their idols and accept the truths of Christianity. He had also discovered Lower California, and had made numerous expeditions, which had cost him a fortune and which had

brought him little else but disappointments and hardships.

Now other figures filled the stage, and Cortes was forgotten. Not only was the door shut in his face, it was barred and bolted against him, and jealous enemies stood on the threshold to deny him justice. As with Columbus, his popularity at Court and in the country waned as soon as he had passed his zenith. Thus did the world reward its heroes in the sixteenth century.

One of the main characteristics of Cortes

was his versatility. Brilliant alike as a soldier, a statesman, and a missionary, he stood out even amongst the great men of his period. Yet his life, so full of promise and so rich in achievement, ended in tragedy. For this he was not entirely free from blame, for there were weaknesses in his character that his enemies were not slow to seize and enlarge upon.

The Shafts of Envy

While striving, with courage born of recklessness, to make Spanish dominion secure in Mexico, envious countrymen plotted his ruin at Court and sought to deprive him of the honours he had so deservedly won. In the course of his long and varied career he was charged with almost every conceivable crime, but most of the complaints about his conduct were proved to be engendered by jealousy and to have no substance.

Most persistent of the imputations of his detractors was that of cruelty. Judged by modern standards, Cortes was, without a doubt, unnecessarily severe, even inhuman. But it is doing him no more than justice to remember that he lived in a barbarous age, an age when the strong exacted a merciless homage from the weak, without regard to method, when brute force reigned over reasoned appeal, and "the survival of the fittest" was a universal creed.

Cortes was not brutal in a revengeful sense. In circumstances of peculiar difficulty, he thought it necessary to make an example of those who opposed his will, and his fault in not giving more humane methods a trial was one he shared with most men of his time. Those who are unwilling to condone his cruelty will still find in the story of his great life heroic deeds that leave the balance of an unbiased judgment considerably in his favour.

A Weak and Sickly Child

His early years were spent at Medallin, in the Spanish district of Estremadura, where he was born in the year 1485. No one thought in those days that Hernando Cortes was destined to enjoy world-wide fame. Very few, indeed, imagined that he would ever reach manhood, for he was a weak, sickly child, whose life was frequently despaired of. However, while others were full of mournful predictions as to his fate, Hernando bubbled over with good spirits, and refused to be depressed at the prospect of having his career prematurely closed. His first handicap in life—the terrible scourge of ill-health—was fought with that grim determination with which he faced obstacles later in life, and as a result he blossomed forth into strong and virile manhood.

The father of Cortes, who came of a very good family, was poor, but he managed to scrape together enough money to send his son,

at the age of fourteen, to the University of Salamanca. It was a vain sacrifice, which he was soon to regret. Instead of developing an enduring interest in law, as his father had planned, Hernando gave up his studies after two years and left the university, irrevocably determined to seek adventure. His parents, with their minds still fixed on a profitable law career for their son, did their best to dissuade him, but Cortes was headstrong and adamant.

A Choice of Adventures

His first thought was to join the adventurous band gathered under the leadership of Gonzalvo de Cordoba, a military captain whose deeds had brought him much renown in Europe. Hearing, however, that a native of Estremadura, named Nicolas de Ovando, had been appointed governor of Hispaniola and was about to set out with a large force to take up his duties, Cortes decided to throw in his lot with him. Hispaniola appealed to him as a likely centre for adventure.

Once more circumstances combined to bring about a change in his plans. Before he reached Hispaniola, before even he left the shores of Spain, he met with an adventure, but it was not of the type he wanted. One of his chief weaknesses was that of falling in love with practically every good-looking woman he met, and this desire for the company of the fair sex led to an accident, a few nights before he was due to sail, that nearly ended fatally. He was attempting to scale a high wall, when he lost his hold and fell heavily to the ground. His injuries were sufficiently serious to keep him in bed for several days, and by the time he was convalescent Ovando had sailed.

Cortes thereupon reverted to his original intention of joining Cordoba and journeyed to Valencia. Here he experienced all the hardships of an adventurer's career without enjoying any of its lustre, and after months of suffering and privation he returned home, a sadder but not much wiser man. For months afterwards his mode of living was indecorous in the extreme, and from being a disappointment to his family he came to be regarded as a wastrel. Cortes and immortal fame seemed at that time to be as far apart as the two poles.

Decides to Go to Hispaniola

Fortunately, he had sufficient strength of character to pull himself together before he had wandered far on the downward path. Often must he have wondered during those dark days what the future held for him, and in an effort to recover some of the ambition of his early youth he decided suddenly to make for Hispaniola. Only too relieved to get rid of such a worthless son, his parents readily gave him the money necessary to enable him to

CORTES OVERCOMES THE AZTECS AT OTUMBA



Following the death of Montezuma, the Aztec emperor, at the hands of his revolutionary subjects, Cortes was attacked by the Mexicans in the Otumba plain. The battle ended in favour of the Spaniards, and Cortes, having organized an army of natives, gradually overcame the resistance offered by the various Mexican provinces and then marched against and captured the city of Mexico.

For biographies not included in the Groups see detailed Index

carry out his project, and the early part of 1504 found him on the way to San Domingo.

This voyage witnessed the first of a remarkable series of incidents, which led people to believe at one time that Cortes was blessed with Divine guidance. Driven out of her course by a severe storm, his ship drifted aimlessly for several days. A slow death by starvation threatened the whole company, but, when the end seemed near, a dove alighted on the boat. The next day, by following the direction of its flight, they succeeded in reaching land.

A Popular Figure in San Domingo

Welcomed by Ovando, Cortes was soon entrusted with responsibility, and he immediately proved his worth. During the next few years he took part in many expeditions against Indian rebels, and gained much military experience and knowledge that was to be useful to him later on. In 1511 he joined an expedition under Velasquez, which had for its object the conquest of Cuba, and, earning fresh distinction, he became one of the most popular figures in San Domingo. Ten years' honest and strenuous service had completely transformed him. From a dissolute youth with no ambition in life, he had become a handsome, dark-bearded, plausible, well-spoken, sad-featured man, imbued with aspirations and with the will to conquer.

Shortly after his marriage to Catalina Xuarez, which took place after his return from Cuba, Cortes was given the command of an expedition to Mexico. The New World had been discovered twenty-five years before, and Mexico was popularly supposed to hold the fabulous riches which Columbus had tried unsuccessfully to find. Rumours that he was likely to be deprived of his command urged Cortes to complete his preparations with all possible haste. The conquest of Mexico was a task that made a joyous appeal to him, and he was determined not to let such a unique opportunity slip by if he could avoid it.

Gives a Butcher a Gold Chain

The need for haste and secrecy became more and more apparent as the days passed. No longer was there the least doubt that the governor intended to supplant Cortes at the last moment, but the wits of the latter were more than a match for the governor's. On the eve of sailing, Cortes persuaded a butcher to hand over all the cattle he possessed, sufficient to supply a large-sized town, and in payment gave the surprised vendor a gold chain which he had worn round his neck. The final preparations completed, Cortes sailed hurriedly from Santiago with a miniature Armada, on the 18th November, 1518. His adventure had begun.

Velasquez, the governor, made the old mistake of shutting the stable door after the horse had escaped, and he paid the inevitable penalty. With some miles separating them, Cortes could afford to be defiant, and when, at Trinidad, he received orders to return, he courteously but firmly refused. Velasquez then made a further attempt to recall him at Havana, where the governor was peremptorily ordered to arrest Cortes, but, with the unswerving support of all his men, he once again declined to be accommodating.

Cortes probably realized that something more than his own efforts would be required before he could hope to bring his risky venture to a successful conclusion. Like Micawber, he was always hoping that "something would turn up," and his optimism was not unrewarded.

Two Pieces of Good Fortune

At the very outset good fortune brought him two allies, who were to prove of invaluable assistance to him. On the island of Cozumel, just off the Mexican coast, he came across a Spanish sailor, who had survived a shipwreck some years before, and who had gained a most useful knowledge of native languages and customs. Then again, in March, 1519, shortly after landing on the shores of Mexico, a native chieftain presented him with a beautiful princess, whom he called Donna Marina. She was given him as a slave, but the kindness and courtesy of the gallant Spaniard won her love, and it was as an adviser and interpreter that she accompanied the expedition.

Even more valuable than either of these accessions was an old Mexican tradition, which proclaimed that a fair-skinned god had once ruled over the land, and had been driven out by a bloodthirsty deity, who demanded human sacrifices. When therefore the Mexicans heard that white men had arrived in their waters "in towers that moved hither and thither upon the sea," they thought their old deity had returned. Cortes was therefore rendered great homage, and was received with every circumstance of pomp and ceremony.

As soon as he landed Cortes sought an interview with Montezuma, the great Mexican emperor, and asked for gold "to cure a disease of the heart," from which, he said, he and his men were suffering. The emperor sent him numerous presents as evidence of his good will, but refused to see him.

In a Serious Predicament

Cortes was puzzled. His forces were too weak to enable him to conquer the country, and his passage through the thickly populated area that separated him from the capital was sure to be opposed. Yet what was the alternative? To give up his project when he had

advanced so far was unthinkable, and if he returned to San Domingo for reinforcements he knew he would be arrested.

To some men the latter course would have seemed the lesser of two evils, but not to Cortes. He was an extraordinary man, resourceful, courageous, and full of daring, and, having once decided to march on the city of Mexico and risk the consequences, he went to the length of destroying his fleet, to prevent his men from deserting and to deprive himself of the opportunity of leaving Mexico before his work was finished. Nothing could better illustrate the iron resolution and grim determination of the man than this audacious deed.

Was He a God?

Cortes had laid the foundations of Vera Cruz and had covered over half the distance to the capital before he met with serious opposition. By that time the natives had begun to doubt whether this fair-skinned stranger was, after all, their god, and they gathered together an army of 50,000 to test his divine origin.

The first crisis was reached when Cortes found himself compelled to give battle to this large force, but mainly through his horses—"frightful beasts," as the natives called them—he won a decisive victory. The Mexicans made the fatal mistake of fighting in "parties," and with their crude swords, bows and arrows, and stone-throwing weapons, they proved no match for the highly trained Spaniards with their armour and artillery, and with a skilful commander to lead them.

After their defeat the Tascalans, as they were named, joined forces with the Spaniards against their common enemy, the Aztecs, and, with a greatly augmented company, Cortes continued his march to the capital. When he was less than one hundred miles away from his goal, the Aztecs planned a treacherous attack on him. Luckily he was warned in time by Donna

Marina and was able to turn the tables on the plotters. When Montezuma heard that the invaders were approaching the city, he became greatly alarmed and dispatched magicians to stay their progress. This failing, he resigned himself to his fate, and Cortes entered the capital without resistance on the 8th November, 1519.

RECEPTION OF CORTES BY THE AZTEC EMPEROR



The magnificent and courteous Montezuma received Cortes with profuse tokens of friendship. He alighted from his golden palanquin, drawn by barefooted nobles, and greeted his visitor with exquisite politeness, and then ordered the royal attendants to conduct him to his apartments.

The beauty of the city of Mexico exceeded the Spaniards' wildest flights of fancy. Situated on an island in a small lake, and connected with the mainland by three giant causeways, it was a veritable "fairy city," with its host of gorgeous temples and palaces, its Venetian waterways, and its background of majestic mountains.

Small wonder that the Spanish soldiers were constrained to ask if "this that they saw was not a thing in a dream."

Cortes made straightway for the emperor's palace, where he was received in state by the gorgeously attired Montezuma and given rich presents. Then he withdrew to consider the next step. In striking contrast to the Spanish leader, Montezuma was very apprehensive of the future; yet his worries and problems were as nothing compared with those of Cortes. The position bristled with difficulties. How long would the Aztecs suffer these unwanted strangers to remain in their country? What chance had he of holding the city if they rose against him? Should he return to Spain or attempt to form a settlement at Vera Cruz?

Secures the Person of the Emperor

None of these pressing questions could be answered at once, and Cortes decided to await events. As a measure of protection against sudden attack, he thought it advisable to keep the emperor in close confinement as his guest, and, accompanied by Donna Marina and a small escort, he went to the palace and politely requested Montezuma to surrender himself. Desperate situations call for desperate measures, and this is the only excuse that can be offered for such an amazing piece of effrontery. Fortunately, after many refusals the king gave way, and, amidst the evident grief of his followers, he was conducted to the Spaniards' quarters.

No untoward incident occurred for six months, but Cortes was conscious of a gradually increasing restiveness among the population. The Aztecs accepted the indignity of having their emperor made a prisoner; they accepted the further humiliation of performing acts of vassalage to the King of Spain. But when Cortes interfered with their religion, when he broke up their idols and banned their human sacrifices, they raised their voices in angry protest and vowed to turn this meddling stranger out of their gates.

Danger from Another Quarter

A more pressing danger, however, threatened suddenly from a totally different quarter. While Cortes was playing for time and attempting to cope with his difficulties in the capital, a message reached him that a fleet of eighteen ships with 1,200 men on board had arrived. They had been sent by the governor of Cuba with orders to secure Cortes and take him back in custody.

The nimble-minded Cortes acted with his usual promptitude. After attempting, without success, to negotiate with Narvaez, the leader of the expedition, he went forward rapidly to meet him, leaving a small garrison to keep order in the city. Unprepared for the sudden

and brilliant attack made on him, Narvaez was easily defeated and was made a prisoner. Cortes thereupon persuaded the rest of the Spanish army to join him, and thus secured reinforcements that were to prove extremely valuable the following year.

The Aztecs Attack the Spanish Garrison

One peril had been averted, but another immediately threatened. Taking advantage of Cortes' absence, the Aztecs rebelled, deposed their king, and attacked the little Spanish garrison in the capital. Cortes therefore lost no time in returning to the island city, where he arrived in June, 1520, with an army of 1,300 men.

The situation, already serious, rapidly became critical. For several days he and his men were besieged in their quarters and subjected to a continuous bombardment by the Mexicans, who occupied the house-tops, towers, and all the surrounding points of vantage. At one stage a large body of natives, who had stationed themselves on the temple summit, proved so troublesome that Cortes himself, though wounded, led an attack on the strong position. In a desperate fight lasting three hours the intrepid commander proved his mettle by dislodging the enemy and regaining his quarters.

In an effort to dissuade the mob from further violence, Montezuma, who had become an object of contempt, was killed. The Aztecs soon afterwards tired of their combative methods, and came to the conclusion that the simplest way to kill off the Spaniards was to starve them. Cortes saw that flight was imperative, and one night he withdrew his little force from the city. Divining his intention, the Aztecs made a furious assault on the Spaniards, and, forced to contest every inch of the way, Cortes lost two-thirds of his army before he reached safety.

Besieges the Island City

After this terrible experience, he might have been expected to give up all idea of conquering Mexico, but, instead, he set out with remarkable perseverance and determination to get back what he had lost. Boats were built, his army was strengthened and reorganized, and, aided by the friendly Tlascalans, he laid siege the following year to the island city. The Aztecs fought with a fury born of desperation, and for weeks the fighting continued.

In spite of the superb generalship of Cortes and his own contempt for danger, victory eluded the Spaniards for a long time. Not until their new emperor had been captured and the dread horror of famine had thinned their ranks, did the brave Aztecs surrender, and when, on the 13th August, 1521, Cortes entered the capital, he found it a grim shadow of its once beautiful self, a city of disease and death.

The final defeat of the Aztecs made Spanish dominion secure, and Cortes immediately set to work to place the stricken country on the road to prosperity. The city of Mexico was rebuilt and repopled, the agricultural and other industries of the country were encouraged, and his field of conquest was widened by numerous expeditions, which Cortes often commanded in person. He turned from war to peace with astute adaptability, and revealed himself to be as able an organizer as he was a fighter.

One of the secrets of his success during this period of reorganization was his wonderful popularity. His men, many of them outlaws recruited from the lowest classes, gave of their best at his bidding, and when another man arrived from Spain to supersede Cortes, they flatly refused to serve under the newcomer, and Cortes was persuaded to retain office. At the end of 1522 he was appointed governor of New Spain by the home Government, who must have grown tired of sending out expeditions with the fruitless quest of recalling him.

Reported Dead

On one occasion, while Cortes was on an expedition to Honduras, rumours of his death reached the city of Mexico, and the place became a centre of confusion and riot. The fruits of years of strife and valuable work were rapidly being dissipated, when he proved the falsity of the rumour by returning suddenly to the city, and restored order. Not once, but many times, his wise ruling and genius alone stood between Mexico and disaster. But during his absence complaints of his conduct had been sent to Spain by every ship. He was accused of defrauding the royal treasury and even of plotting to set himself up as king.

Soon Ponce de Leon was sent out to investigate the allegations against Cortes, but, as the commissioner died within a few weeks of his arrival and as the persecution continued, to clear himself of the many fantastic charges laid against him. Cortes returned home in May, 1528.

His fame had gone before him, and, like Columbus, he received a tumultuous welcome in his native land. At Court he was accorded high honours, and for two years he basked in publicity, drinking freely from the cup of triumph that his fame had filled to overflowing.

When, however, he returned to Mexico in July, 1530, Cortes went, not as governor, but

AFTER HIS DECISIVE VICTORY AT OTUMBA



The victorious Cortes entering Tlaxcala, after his overwhelming victory at Otumba. A year later he accomplished his mission when the city of Mexico capitulated on the 13th August, 1521, after a desperate resistance of several months' duration.

with a military appointment as captain-general. Although he did not realize it, his star was now on the wane. His past good fortune seemed to desert him all at once, and for the rest of his life he was more or less continuously engaged in a lonely and forlorn struggle against adversity. With undiminished energy and perseverance he made several expeditions, which he equipped and financed himself, and in his quest for the "South Sea" he made many important discoveries, including that of the peninsula of Lower California.

These did not, however, bring him the reward he deserved. On the contrary, they gradually swallowed his fortune, and so reduced did his circumstances become that he was compelled to sell his wife's jewels in order to purchase the necessities of life. The chief cause of the failure of his ventures was the animosity of the governor, who hindered rather than helped Cortes in his bold plans. When he was not travelling, he lived on the outskirts of Mexico city with his second wife and family, to whom he seems to have been very devoted. He had married again during his stay in Spain, his bride being Juana de Zuniga, the daughter of a nobleman.

Ten weary years dragged by, years of hardship marked by constant recrimination and quarrels with the governor. These, with the loss of money and property he suffered, made his life a misery. In an attempt to right things once more he returned to Spain in 1540, but, if he hoped to win the flint-hearted monarch's sympathy, he was doomed to grievous disappointment. No longer was he a useful servant of the state, and the king and his Court ignored him altogether. Nor was his reception by the populace, the same people who had acclaimed him ten years before, less chilly.

Public memory is notoriously short, and those who recognized in the aged grey-headed figure the handsome dashing Hernando Cortes of old, denied him the veneration due to a veteran patriot. The country he had served so faithfully repaid him with bitter neglect, and the mortification

he felt at this treatment must have hastened his end.

In a final effort to restore himself to royal favour, he gave his valuable aid in an expedition against Algiers in 1541. This further service failed, however, to bring about a change in the king's attitude, and Cortes was driven to make an appeal by a letter, in which he set out his grievances. Revealing his deep resentment and grief at his infamous treatment, it remains one of the most pathetic and moving documents ever penned. In this letter Cortes wrote :

I thought that, having laboured in my youth, it would so profit me that in my old age I might have ease and rest. And now it is forty years that I have been occupied in not sleeping, in eating ill, and sometimes eating neither well nor ill, in spending my estate and my life all in the service of God, gaining for my king many and very great kingdoms. I see myself (he concluded) old and poor and indebted. Not only have I no repose in my old age, but I foresee labour and trouble until my death.

Denied justice, broken in health and spirits, Cortes retired to a little village near Seville, where on the 2nd December, 1547, he breathed his last. His first resting-place was in Seville, but his remains were afterwards reinterred in Mexico. The false accusations of his enemies and his cruelty besmirched his memory for many years after his death, but he was finally vindicated by posterity and given his proper place amongst the heroic figures of the past.

It is idle to judge such a man as Cortes by modern standards, for manners and morals alter with the centuries. His conquest of Mexico was conducted on lines that were sanctioned by the rules of warfare then in use, and, judged by the moral

standards of his age, his religious and patriotic motives, although they were sometimes tinged with personal considerations, justified the aim for which he fought.

[See *Lives*, by Arthur Help (2 vols., 1871), and F. A. MacNutt (1909).]

PLANTING THE CROSS



This statue represents Cortes planting the cross on an Aztec altar, at which it was the custom to make human sacrifices. The conquests of Spain were made in the cause of Christianity.

The FOUNDER of the BANK of ENGLAND

William Paterson, a Farm Labourer of Scotland, Who Established a National Institution Which Has Become the Soundest Financial Concern in the World

IN December, 1699, a small vessel bearing a little group of sick and disillusioned fortune hunters approached the coast of Scotland after many months' perilous adventure in foreign seas. It was the sole survivor of three vessels that had set out some eighteen months before amidst scenes of wild enthusiasm, and the scantily clad and semi-starved men and women and children in it were all that remained of a brave host that had gone forth full of hope and confidence in the future.

Among the homesick and impoverished wanderers was a man named William Paterson, whose scheme it was that had inspired the expedition, and who had suffered more from its tragic failure than any of the participants, for he had lost his wife and child; and illness, of which, we are told, "trouble of mind was not the least cause," had reduced him almost to a skeleton.

He was also the poorer by £10,000, and the disaster had robbed him of the fruits of years of painstaking research and daring enterprise. Yet his spirit had not been entirely crushed by the calamities that had overtaken him and those who had entrusted their lives and money to his keeping. Even as his eyes turned gratefully towards his native country, and he sniffed at the air which was to restore him to health, his ingenious and never-resting mind was evolving plans for another expedition.

This lifelong dream of Paterson, which he was destined never to carry out, was the establishment of a trading colony at Darien, on the narrow strip of land between North and South America, which is to-day bisected by the Panama Canal. Paterson had explored this district during his travels as a youth, and, not unreasonably, had come to the conclusion that it would form an ideal position for a trade centre since it afforded easy access to both the Pacific and Atlantic Oceans.

Unable to obtain support for his scheme in England, where he had become a person of importance, Paterson returned to Scotland and so convinced his countrymen that the acquisition of Darien would enrich them that they subscribed immense sums of money for the expedition. The shrewd, hard-headed merchants of the north saw in the proposal a long-sought opportunity to compete favourably with their more successful southern rivals.

All went well until a few days before the

SITE WHEREON THE BANK WAS BUILT



It was on the site of this London house, occupied by Sir John Houbton, that the present premises of the Bank of England were erected in 1732.

start of the well-equipped expedition, and then Paterson suddenly fell under suspicion owing to the discovery of an irregularity in the finance of another scheme which he had promoted. He was entirely innocent of the charges made against him, and subsequently cleared himself, but there was no time for inquiry, and so Paterson, who should have been the director of the expedition, was obliged to join as an ordinary emigrant.

Perhaps this was one reason for the failure of the expedition. Misfortune, however, dogged the emigrants from the start.

Many died on the way from sea sickness and disease, and when Darien was reached, anarchy and disorganization threatened the very life of the community. Scarcity of food and drink, and fear of attacks from Spanish colonizers, aggravated the disaffection. After some months of misery the disappointed Scots put to sea again, and those who survived resolved never again to embark upon Utopian schemes.

Yet Paterson was a man of genius and sound practical sense, and it is probable that had he been given full command of the expedition there would have been a different tale to tell. That this singularly original and broad-minded man, who anticipated the free trade doctrine of Adam Smith, never lost faith in his Darien scheme is shown by the persistency of his subsequent efforts to revive interest in it.

But the fates were against him, and Britain lost what might have been another India.

Paterson, however, had already left his mark upon the age. He is remembered, and will always be remembered, as the chief founder of the greatest banking institution in the world. This achievement he carried out against great obstacles, and it was only one of many sound financial schemes which he endeavoured to introduce at a time when the commercial prosperity of England was endangered by corruption and unscientific methods.

William Paterson was born in April, 1658, at the farmhouse of Skipmyre, in the parish of Tinwald, Dumfriesshire, Scotland. Very little is known of his early years, but it is stated that when he was about seventeen he tired of the

THE GROCERS' HALL AS IT WAS IN 1695



Within a few months of the inauguration of the bank, the directors rented Grocers' Hall. There they carried on business until the bank's removal to new premises in Threadneedle Street.

life of a farm labourer and set out for London with a pedlar's pack on his back and all manner of brilliant schemes in his head.

London failed him, and he emigrated to the West Indies, where for some years he lived a nomadic existence among the semi-heathen peoples of the Bahamas. Tradition has it that he joined with the buccaneers who sailed up and down the coast, looting ships and raiding ports. A more probable account of his life at the period describes him as a missionary. He had been brought up in a strictly religious atmosphere, and although he had fled from this, it is more than likely that, finding himself among people lacking any kind of spiritual enlightenment, he tried to instil the Christian doctrine into them.

He formed important trading connexions in the West Indies and New England, and must have been frequently in London, for he was well known and rich enough in 1681 to be elected a member of the Merchant

Taylor's Company, being admitted to the full livery eight years later.

In coffee-houses, both in London and in Holland, Paterson eagerly discussed his Darien scheme, and he also took a prominent part in the revolutionary movement of 1688, which resulted in the consolidation of the Whig party. At that time Liberal opinions were regarded with suspicion in England, and the headquarters of the new party were actually in Holland.

Paterson settled finally in London about 1689, and two years later, having successfully instituted the Hampstead Water Company, he submitted his scheme for the foundation of the Bank of England to the Government. In this he was associated with Michael Godfrey (who was afterwards killed at the siege of Namur in 1695 through rashly venturing into the danger zone with King William III) and several other London merchants.

Paterson was the genius of the group. It is impossible to do justice to his brilliance and enterprise or to grasp the soundness of his economic principles without first trying to realize the condition of money transactions in England at that time.

Charles I's "Forced" Loan

To begin with, there was no safe depository for money. Banks did not exist in London before 1640. At that time rich merchants deposited their bullion and valuables with the Royal Mint, which had its headquarters at the Tower of London. But the obvious disadvantages of this method were demonstrated during the reign of Charles I, when that monarch, failing to raise enough money for his war against Scotland by ordinary means, "forced" a loan from leading merchants of the City by the simple process of confiscating their "deposits" in the Tower.

After this the goldsmiths acted as caretakers of the merchants' money. They gradually became recognized bankers, lending out money at interest and manipulating the exchange. But there was still no real guarantee of security, for the goldsmiths, by the nature of their trade, had ample opportunities for clipping and debasing the coinage, and that they did so extensively and to their enormous profit has been abundantly proved.

"If the bulk of the money of the nation," wrote one of the founders of the Bank of England, "which has been lodged with the goldsmiths, had been deposited in the Bank four or five years past, it had prevented its being so scandalously clipped, which one day or the other must cost the nation one and a

half millions or two millions to repair it." This estimate proved to be very nearly correct.

Throughout the Protectorate of Cromwell the goldsmiths continued to perform the function of bankers, and since the wealth of England developed greatly during this period, their power became enormous, for they could raise large loans and they were not particular about security, relying upon their profits in one direction to make up for losses in another.

This haphazard granting of credit and frequent failures and runs on the goldsmiths' banks led Sir Balthazar Gerbier, a City merchant, to write a pamphlet advocating the establishment of a "bank of payment" in London for the purpose of stabilizing credit on a national basis. This was followed in 1658 by a petition to Parliament drawn up by Samuel Lamb, entitled, "Seasonable Observations humbly offered to his Highness the Lord Protector," proposing the foundation of a bank, and pointing out the advantages of increasing the national capital, securing it from irregular manipulation, and lowering the rate of interest.

Power of the Goldsmiths

These suggestions were unheeded, and when Charles II came to the throne he still further increased the power of the goldsmiths by borrowing large sums from them. In a little while both Crown and Government were hopelessly dependent upon these amateur bankers. Samuel Pepys observes in his Diary that the Treasury is paying 15 to 20 per cent. for money, which "is a most horrid shame."

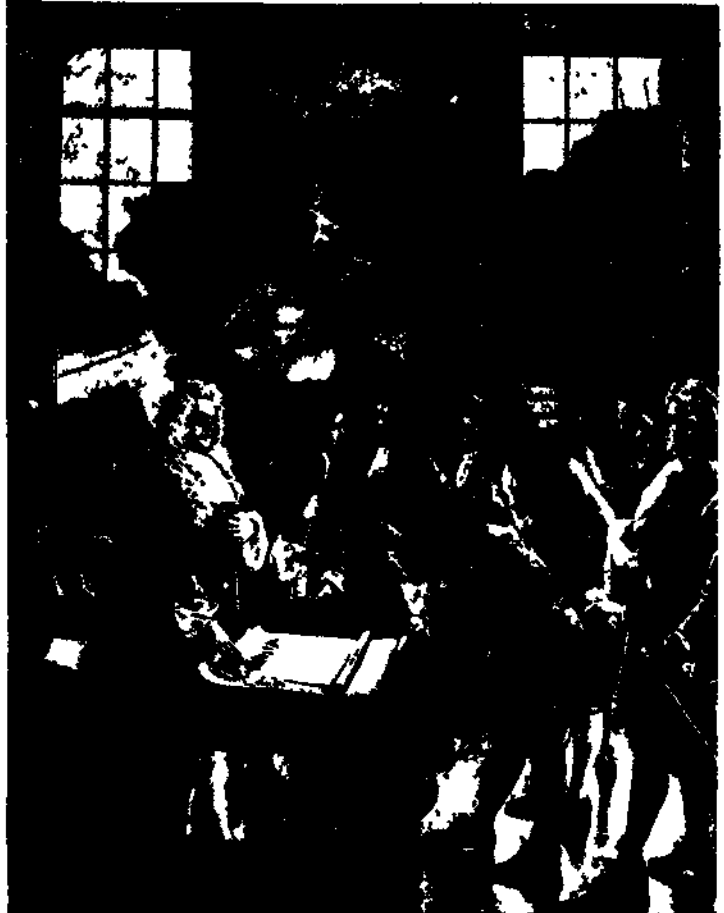
Later on, however, Charles II discovered a means of raising money outside the country. He entered into a secret treaty with France to make war against Holland, and received three million pounds. In spite of this he was soon again in difficulties, and on the 2nd January, 1672, he suddenly ordered the suspension of all payments from the Exchequer for twelve months.

Subsequently he reduced the period to six months, but many people were ruined. In a desperate effort to save themselves the goldsmiths' banks stopped payment, but they lost over three million pounds. A lawsuit

followed and dragged on for many years, the goldsmiths finally winning their case. The interest paid on this money, which is known as the "bankers' debt" still forms part of the national debt, for which the Bank of England is responsible, having been consolidated with the South Sea annuity.

Such experiences as these opened people's eyes to the need for an entire reformation of

THE FOUNDING OF THE BANK OF ENGLAND



The original of this picture, by G. Harcourt, is one of the paintings that adorn the walls of the ambulatory of the Royal Exchange, London. The others represent equally important episodes in the country's history.

the banking system. No form of investment or deposit was safe; even the City Orphans' Fund was liable to misappropriation and depreciation. By now the coinage was so debased that people preferred to accept bank-notes rather than money. During the early years of William III's reign five pounds in cash was worth hardly forty shillings.

The extravagance of the Stuart kings had left the Crown practically bankrupt, so that when William III came to the throne he and his indefatigable Chancellor of the Exchequer

Montagu, were obliged to resort to all manner of devices, including a tontine and a lottery, in order to pay for the upkeep of the army. The customs and excise were increased, and there were also introduced the poll-tax, the stamp tax, and the window tax. These were hopelessly inadequate to meet deficiencies, and the king was obliged to beg a loan of £100,000 from the City of London.

Paterson Submits a Scheme

Meanwhile Paterson, at his "Wednesday Club Debates," held in a London coffee-house, was slowly maturing his plans. In 1691 he submitted, with his partners, a scheme for lending the Government one million pounds in return for a yearly payment of £65,000, on condition that the notes of the newly formed bank should be made legal tender. This came to nothing owing to the Government's refusal to legalize the notes. Paterson was so sure of the success of his scheme that he was willing to waive this condition, but his partners would not agree.

A second scheme for a two-million loan was also rejected, and then Paterson drew up his final report upon a proposed corporation to be called "The Governor and Company of the Bank of England." The sum of £1,200,000 was to be raised and lent to the Government in return for a yearly interest of £100,000, and the corporation was to have the right to issue notes up to the value of its capital.

In a pamphlet issued at the same time Paterson outlined his economic creed and formulated the three main principles of his scheme:

1. That all money or credit not having an intrinsic value, to answer the contents or denomination thereof, is false and counterfeit, and the loss must fall one where or other.
2. That the species of gold and silver being accepted, and chosen by the commercial world for the standard or measure of other effects, everything else is only accounted valuable as compared with these.
3. Wherefore all credit not founded on the universal species of gold and silver is impracticable, and can never subsist neither safely nor long, at least till some other species of credit be found out and chosen by the trading part of mankind over and above or in lieu thereof.

Permission Granted for a Bank

The scheme, embodied in the Tonnage Bill, was introduced into Parliament during 1694, and, in spite of vigorous opposition from the goldsmiths and the temporary enthusiasm aroused by a rival but unsound proposition for the establishment of a land bank, Paterson and his friends were granted permission to found their bank.

On the 10th July, 1694, Sir John Houblon, a man of high standing in the City, was appointed governor, and twenty-four directors were elected. Paterson was granted a salary of £2,000 a year and ranked as a director.

The first business of the bank was carried out at the Mercers' Hall, but within a few months larger offices were taken at the Grocers' Hall. The present premises were erected in 1732, on the site of a house previously occupied by Sir John Houblon.

The immediate success of the bank aroused suspicion and jealousy on all sides. Honest merchants were warned of the disasters that would overtake them "if they got into the clutches of this harpy of Grocers' Hall." It was argued that the bank, by offering too attractive an investment, would absorb all the capital in the town and leave none for commercial enterprise; that it would make the Crown and the Government all-powerful; and that if it failed it would drag the whole of England with it to ruin.

Warnings Not Justified by Events

Thanks to the prudence and foresight of the directors, nothing of the kind happened. Bank of England stock rose steadily in value, and the feeling of security that was created had far-reaching effects upon British commercial enterprise. Politically, the creation of the bank had vast consequences. No longer embarrassed for want of money, the Government were able to extricate themselves from the financial obligations incurred by the Stuarts, and England once again recovered her prestige amongst the great nations of the world.

Paterson did not remain for long in close association with the great institution which was almost entirely the product of his own brains. After the tragic death of his co-partner, Michael Godfrey, he found himself in disagreement with the rest of the directors upon several questions of the bank's policy and formally resigned.

He took no part, therefore, in the first great crisis in the bank's history, which occurred in 1696. This was, in one sense, the direct result of the bank's good influence upon financial transactions in general. Seeing the importance of stabilizing the currency, the Government determined upon the issue of a new coinage. Although the step was vital to the continued success of the new financial system, it placed the bank for a time in great jeopardy.

A Run on the Bank

At first the new money could not be coined fast enough to replace the old, and, taking advantage of the temporary shortage of cash, enemies of the bank engineered a run. The directors, however, stood firm. They treated the run as a malicious trick, refused to pay more than 15 per cent. on application, and appealed to the Government for aid.

The Treasury guaranteed the production of £60,000 in new money every week, but still

THE RUSH TO BUY SHARES IN THE SOUTH SEA COMPANY



With the collapse of the South Sea Bubble in 1720, the Bank of England was brought very near to ruin. Panic seized everybody who had money invested in any corporation, with the result that there was a run on the bank. Only by an exceedingly clever ruse did the directors gain time to obtain the necessary financial support.

the demand on the bank exceeded the supply. By now, however, it was realized by all right-thinking persons that the existence of the bank was vital to England's safety and prosperity. Voluntary subscriptions poured in, banks all over the world gave their support, and many shareholders offered to forgo their dividends in order to tide over the crisis. Gradually, the new money circulated more widely and confidence was restored.

Dr. Sacheverell's Sermon

On two other occasions the Bank of England narrowly escaped disaster. It must never be forgotten that Paterson's scheme was primarily a political one, and that it was the Whigs who supported him. During the reign of Queen Anne Tory opposition to the bank broke out again. A sermon preached by Dr. Sacheverell at St. Paul's Cathedral on the 5th November, 1709, in which he attacked the Treasury for its support of the bank, brought about a riot.

Dr. Sacheverell was arrested on a charge of taking liberties with the Government, and his trial led to extraordinary scenes. "There was nothing to be seen," wrote the historian Taine, "but corruption in high places and brutality among the common people—a group

of intriguers leading a populace of brutes. The human animal, drunk with political passions, expressed itself in cries and violence, and, swaying to and fro under the hand of each party by turn, seemed ready to destroy society by its blind outbursts."

A mob, inflamed with rage, and none too clear about its motives, surged through the streets of London. Hearing that the bank premises were in danger of being looted, Queen Anne sent her own bodyguard to dispel the rioters. Dr. Sacheverell was condemned, but, his sentence being a light one, the affair was regarded as a Tory triumph, and for some while the bank was in danger.

The South Sea Company

In 1720, the year of romantic speculation following upon the activities of the South Sea Company, the Bank of England again came near to ruin. Founded in 1711, the South Sea Company had carried on its trading business quietly and successfully for nine years. It originated in a government loan raised by private persons, who received in return an interest on certain state duties and important trade monopolies in the South Seas.

It was thus a rival to the Bank of England, although an insignificant one. In 1720, how-

ever, the national debt assumed large proportions, and Sir John Blount put forward a proposal for an enormous extension of the South Sea Company's loans. No less a sum than £30,981,712 was to be accepted by the company as its responsibility in return for a rate of interest more favourable than that paid to the Bank of England.

Alarmed by this proposal, the directors of the bank made desperate attempts to outbid the South Sea Company. Each side concerned in the struggle made the most extravagant offers. In the end the South Sea Company's proposals were accepted, with the result that

FOUNDER OF THE BANK OF ENGLAND



The fondest dream of William Paterson, the founder of the Bank of England, was to establish a trading colony at Darien. This dream was never realized.

its shares rose within a few months from £310 to £2,000.

In order to maintain this extravagant and artificial price, all sorts of tales were circulated about the discovery of gold mines and hidden treasure in the South Seas. A speculative mania broke out and led to a swift rise in prices. People paid clerks in the South Sea Company as much as £20 for the privilege of being served first, and the clerks went about dressed in clothes trimmed with lace.

Other companies were formed, and the public were gulled into subscribing their money to projects for the discovery of perpetual motion, for extracting silver from lead, "for importing a number of large jackasses from Spain,"

and even "for carrying on an undertaking of great advantage, which shall in due time be revealed."

The South Sea Company, by its own foolish example, involved itself in ruin. One after another the bubble companies were pricked, and at last the biggest of them all, the South Sea Company, burst. Thousands lost all they possessed, and many people, once rich and respected, had to fly from the country.

Paying Out in Sixpences

Panic seized upon everybody who had money invested in any corporation, and there was a run on the Bank of England. The directors had at first decided to guarantee part of the South Sea Company's capital, but the rapid fall of the shares threatened disaster and the directors withdrew just in time. So great was the rush on the bank that agents had to be employed for the purpose of drawing large sums, which they then took back to the bank by a secret door. In this way, and by paying out in sixpences, time was saved and the crisis averted.

It was the last of any consequence, for after that the bank steadily grew in prosperity and became what it is to-day, the soundest financial institution in the world.

Paterson died on the 22nd January, 1719. During his last years he was often almost in want owing partly to the failure of his great Darien scheme, but very largely to his neglect of private interests in the pursuit of public-spirited schemes. He was largely instrumental in bringing about the union between England and Scotland, and, after much delay, received £18,000 in recognition of his services. He wrote many valuable pamphlets on social, political, and economic problems.

Famous Governors of the Bank

Recent governors of the Bank of England have maintained its reputation as an index and safeguard of the nation's financial stability. Perhaps the most famous of the guardians of a great institution was Mr. Lidderdale, who, by the importation of gold, averted a crisis that arose in 1890 from the threatened failure of Messrs. Baring, a firm of City merchants.

A later governor, the Rt. Hon. Montagu Collet Norman, was born in 1871 and was appointed to his responsible post in 1920. His position during the years of financial instability that followed the World War was fraught with grave difficulties, which he overcame by bold, independent action. His aim throughout was to re-establish the gold standard, suspended during the war, and with this in view he visited America in 1925 and conducted successful negotiations with the U.S. bankers.

[See "History of the Bank of England," by A. Andréades (1909).]

The INSPIRED TINKER of BEDFORD

John Bunyan's Tremendous Conflict with Himself and How in Gaol He Dreamed a Dream that Has Made His Name Live for All Time

TO those who are skilled in portents the following fact will be of interest. Thomas Archer, king's chaplain and rector of Houghton Conquest, the parish next to Elstow, in the county of Bedfordshire, made this entry in the chronicle in which he recorded the curiosities of natural history that he came across in his little rural world:

Memorandum.—That in Anno 1625 one Bonion of Elsto clymynge of Rookes nests in the Bery wood found 8 Rookes in a nest, all white as milke and not a blacke fether on them.

We may imagine with what emotions Thomas Bunyan looked at the three milk-white birds that he had found in the rook's nest in the Ellensbury Wood. In the same way we of a later age may wonder how, in a little cottage with smoke-blackened forge, there was born a child whose shining genius has lightened the spiritual and literary experience of mankind throughout the centuries.

The cottage in which the author of the "Pilgrim's Progress" was born stood just within the parish of Elstow, at the foot of a gently sloping hill between two streams, one of which flowed close to the cottage and after heavy rain turned the field behind into a veritable Slough of Despond. Parts of the little house were still standing at the end of the seventeenth century, but soon the site was ploughed up and added to the neighbouring farm.

The Bunyan family had long been established in Bedfordshire, a William Bunyan having held land near Elstow as early as 1199. Local place-names, such as Bunyan's Walk, Bunyan's End, and Farther Bunyan's, point to the age and standing of the family. Various portions

of the ancestral property passed, as time went on, to other purchasers, until at last all that remained in the possession of the family was the cottage in which John Bunyan's grandfather carried on the trade of a petty chapman.

IN MEMORY OF BUNYAN



The beautiful Bunyan window in Westminster Abbey, which was dedicated to the memory of the author of "Pilgrim's Progress" in January, 1912.

John Bunyan was born in November, 1628, the first child by his father's second marriage. His father, who calls himself in his will a brasier, was a mender of pots and kettles, what we now call a whitesmith. Working at his forge beside his cottage, he repaired the household pots and pans of his neighbours.

Although he sometimes doubtless travelled far afield in search of odd work, he had his settled home and steady trade. Thus, when his son says that his father's house was "of that rank that is meanest and most despised of all the families of the land," we must suppose that he was speaking in his usual spirit of self-depreciation, for the Bunyans were far different folk from the more or less disreputable travelling tinkers of the day.

The boy was educated either at Bedford Grammar School or more probably at the village school, but he very soon had to become a bread-winner by helping his father at the forge. He tells us that he never "went to school to Aristotle or Plato," and that what little he learned he soon lost "even almost utterly."

In his sixteenth year came the first great sorrow of his life. His mother died, and within a month the playmate of his childhood, his sister Margaret, was buried in the little churchyard of Elstow. As if this were not enough for him to bear, within two months of his mother's death his father brought a stepmother to the

little cottage in the fields. The loss of mother and sister at this formative period of his life, and the haste with which Thomas Bunyan married again, estranged the lad from his father and his home, and was not improbably the cause of that wild wilfulness of the next few years, which he was to repent so bitterly and so vividly depict.

Enlists in the Army

Smarting under his grief and under the indignity done to his mother's memory, the lad enlisted as a soldier in the civil war, in all likelihood in the Parliamentary army, since, as a county, Bedfordshire was frankly Parlia-

JOHN BUNYAN'S HUMBLE DWELLING



Bunyan's cottage at Elstow, near Bedford. Within living memory this little roadside dwelling was a thatched building with a lean-to forge at the south end, but little is now left of the original structure.

mentarian in sympathies. The stirring incidents of this time could not fail to make a deep impression on the mind of the village lad, and the memories of these soldiering days returned to him in after years, when he came to tell of the fight with Apollyon, the expedition of Greatheart, and the loss and recapture of the town of Mansoul.

Before the disbanding of the army in 1646 an incident occurred which to Bunyan was "a frequent subject of thankful reference"—no less than a providential preservation from death. He was drawn with certain others to go to besiege a certain city. When he was just ready to start, a soldier in his company offered to take his place, to which Bunyan consented. Accordingly, this deputy went to the siege, and, as he was standing on sentry duty, was

mortally shot in the head with a musket bullet.

After his soldiering Bunyan returned to Elstow, where he helped his father at his trade. When he was little more than twenty he married. Who his wife was we do not know, but her coming brought into his life what he had so missed after his mother's death—the presence of love. The young couple were very poor, "not having so much household stuff as a dish or spoon betwixt us both," but in place of a dowry his wife brought memories of a pious home. In their summer walks and winter talks she would tell her husband many a tale of her father. What was more, she brought with her two books, which had belonged to the good old man, "The Plain Man's Pathway to Heaven" and "The Practice of Piety," in which, says Bunyan, "I should sometimes read with her, wherein I also found some things that were somewhat pleasing to me." He was finding happiness.

His Love of Country Sports

The influence of so godly a woman had a profound effect on Bunyan, who up to this time had found his chief delight in those pastimes that appeal to every village youth. Without being addicted to any of the grosser forms of vice, he had been the ringleader in all the rural sports, which, though harmless enough in themselves, were odious to the precisians among whom he dwelt. Of these sports the chief were dancing, playing at tipcat, and ringing the bells of the parish church.

One bad habit he had acquired in early boyhood, which lasted until he was a grown man—that of profane swearing. "Even as a child," he says, "I had few equals in cursing, lying, and blaspheming the holy name of God." A woman in the village who was by no means over-nice in her language protested "that it made her tremble to hear him, that he was the ungodliest fellow for swearing ever she heard in all her life, and that it was enough to spoil all the youth in the whole town."

Giving Up His Old Enjoyments

From a boy Bunyan had been subject to fits of remorse for his shortcomings, but the real struggle began after his marriage. His wife's piety and the godly books she had brought from her home began to work within him. One by one he dropped his old pursuits. One Sunday he was playing tipcat on the grass round the broken pillar of the old market cross. He had struck the cat one blow, and was going to strike it a second time, when "a voice did suddenly dart from Heaven into my soul, which said, 'Wilt thou leave thy sins and go

to Heaven, or have thy sins and go to hell? " So tipcat had to go.

He had always been very fond of ringing the bells in Elstow Church, but soon he came to think that bell-ringing was wrong, and gave up this also. But he never lost his love of bells, and when his pilgrims come near the Celestial City the welcome they receive is a peal of bells. This renouncing of his bell-ringing cost him many a pang, and it was with reluctant steps that he turned from the belfry. Many a time would he lean against the old doorway and look on longingly while a friend pulled the rope.

It was the same with dancing. He had loved to dance with the lassies on the village green or in the old moot hall. This he found even more difficult to drop than bell-ringing, and it was a year before he was able to give it up. Swearing—his only serious failing—he left off at once and entirely.

Reading the Bible

He soon became regular in attending sermons and services, and took to reading the Bible. The historical parts he managed well enough, but "Paul's epistles and such like Scriptures," he tells us, "he could not away with." The neighbours were astonished to see such a change in the wild young man. Their notice flattered his vanity, and he became proud of his godliness. "I thought no man in England could please God better than I."

For about a twelvemonth this self-satisfaction lasted. Then one day he went into Bedford to repair some kitchen utensils, and saw a little knot of poor women sitting at a door enjoying the sunshine and "talking about the things of God." The young tinker stopped to listen. He had thought that he himself was competent to speak of religion, but these godly women "spake with such pleasantness of Scripture language, and with such appearance of grace in all they said" that they seemed to move in a world to which Bunyan was a complete stranger. His self-sufficiency fell from him; he was humbled and fascinated by their wonderful inner experience. Time and again he walked into Bedford to hear their discourse, and the more he listened the more there came "a great bending in his mind" towards godly meditation.

From the conversation of these pious dames was born in Bunyan a terrific spiritual conflict, which lasted several years. In 1653 he joined the little nonconformist body of which these women were members, and he soon became greatly attached to "holy Mr. Gifford," an ex-army officer, who had been appointed rector of St. John's Church, Bedford.

About 1655 Bunyan moved to Bedford, and soon after his removal he lost his devoted wife and also his beloved pastor. By this time

IN PRISON CELL BUT NOT DISCONSOLATE



In gaol Bunyan found plenty of occupation. He read and wrote, he preached, he meditated, he made tagged laces to support his family, and, when he was in the mood, he beguiled the hours with the sweet music of his flute.

he had become well known at the church. He was chosen deacon, and, after practising his gift of exhortation, was formally recognized as a preacher in 1657. The fame of his eloquence spread far and wide. In woods, in barns, on village greens, and in town chapels, crowds flocked from all parts to listen to the burning words of the converted tinker. Some incumbents welcomed him to their pulpits; others

were "angry with the tinker because he strove to mend souls as well as kettles and pans."

On the 12th November, 1660, Bunyan set forth to hold a service at Lower Samsell, some miles distant from Bedford. Arrived at the farmhouse where the meeting was to be held, he was told that the local magistrate had issued a warrant against him, for at the Restoration the old acts against nonconformists had been revived. There was yet time to escape had he been so minded, but Bunyan was not the man to run from his duty, and,

the farmhouse and called upon him to stop and go with them. As the preacher turned to leave he besought the people not to be discouraged, and then, the intruders growing impatient, quitted the house.

The magistrate was not unkindly, but, as Bunyan vehemently refused to give up preaching, Mr. Justice Wingate was forced to commit him for trial to the county gaol. This was to be his home for the next twelve years. In 1666 he was released through some powerful interest and was free for a few weeks, after

which he was reimprisoned for the same offence. Some months before his arrest Bunyan had married again, and at this time of difficulty the second mother of his children worked nobly for his release, even carrying a petition to the House of Peers; but in vain. A pardon was out of the question, so firmly was Bunyan set upon his preaching.

In this "close and uncomfortable" place Bunyan found plenty of occupation. Although a prisoner, he did not have to give up preaching entirely, for often there was a considerable congregation within the prison walls. He also acted as spiritual guide to those who had obtained permission to bring their affairs to him.

How He Used His Leisure

For the support of his wife and children he made many gross of tagged laces, which he sold to the hawkers. He had much time for reading, poring long and deep over the Bible and Foxe's "Book of Martyrs," and the long hours of enforced leisure gave him ample opportunity for meditation and for writing. Books in prose and verse began to flow from his pen. The first book written in this prison was a metrical dialogue entitled "Profitable Meditations"; others include the notable "Grace Abounding" and the "Holy City," the latter expanded from a prison sermon and dealing with the vision of the New Jerusalem.

In 1672 the long imprisonment came to an end by the suspension of the penal statutes against nonconformists, and Bunyan was elected pastor of the congregation at Bedford. Since St. John's Church had been returned to its original owners at the Restoration the nonconformist body had been wanderers, meeting in each other's houses or out of doors. Now they set about to find a home, and before long they succeeded in securing one, together with

THE PILGRIMS REACH DOUBTING CASTLE



In the second part of "Pilgrim's Progress" the difficulties are less severe. So far from being shut up in the dungeons, Greathart, Old Honest, and the rest strike off Giant Despair's head and pull Doubting Castle about his ears.

besides, flight at such a time would bring discredit on his profession and discouragement on his followers.

To and fro beneath the leafless elm-trees outside the house he paced, until the time fixed for the service. After saying a prayer, he had just begun to preach when the constable, accompanied by the magistrate's man, entered

ELIZABETH BUNYAN INTERCEDES FOR HER HUSBAND'S RELEASE FROM GAOL



"The Wife of Bunyan Interceding for his Release from Prison," after the painting by G. Duvall. Some months before his arrest Bunyan had married again, and at this time of difficulty Elizabeth Bunyan, the second mother of his children, displayed undaunted courage in seeking her husband's release; but her noble efforts were unsuccessful.

the necessary licence. In a barn within an orchard belonging to one of the members of the congregation Bunyan began the exercise of his ministry, which ended only with his death.

In 1675 the acts against nonconformists again came into force, and the lives of the preachers were not without risk. Among the townspeople of Reading there is still a tradition that in those days of persecution Bunyan came to the town to preach in the disguise of a carter, with a great whip in his hand. The place of meeting, so the story goes, was in a side lane, and from the back door of the building the people had access to a bridge over an arm of the river Kennet, by which they could escape if need be.

An Errand of Mercy at Reading

Bunyan's last journey was to Reading, whither he rode not only to preach but also on an errand of mercy. A certain young man, a neighbour, having incurred the displeasure of his father, besought the preacher to effect a reconciliation. Nothing loth, Bunyan "used such pressing arguments and reasons against anger and passion" that the old man was completely mollified. With a glad heart Bunyan rode back to London through driving

rain, and arrived drenched to the skin and very tired at the house of his friend, John Strudwick, a grocer of Snow Hill, where, on the 31st August, 1688, he died. He was buried in Strudwick's vault in Bunhill Fields.

Mingling with the Great in London

In London, where Bunyan often preached, the author of the "Pilgrim's Progress" was regarded with the greatest interest and welcomed with hospitality by the highest in the land. When Charles II expressed surprise that so learned a divine as Dr. John Owen could bring himself to listen to an illiterate tinker, Owen replied that he would gladly exchange his learning for Bunyan's power of touching men's hearts. But, although Bunyan mingled with the great in London and had marvellous influence with them, he could never be prevailed upon to leave the country town where he had laboured so long. For all who asked him to leave Bedford and come to the larger field of service in London, he had the same reply: "I dwell among mine own people."

In 1678 was published the work that has made Bunyan's name live for all time—the immortal allegory, "Pilgrim's Progress." That it was written in prison, either wholly or in

part, is certain, for Bunyan himself tells us that the den in which he dreamed his wonderful dream was the gaol; but, since it was not his habit to keep his works long in manuscript, it is very doubtful whether he wrote it during his twelve years' imprisonment in Bedford county gaol. The probability is that it was written, in part at least, during a short imprisonment in the early months of 1676, and not in the county gaol, but in the little town gaol on the many arched bridge over the Ouse.

It was the custom of the Rev. William Bull, who died in 1814 and who was a member of the Bedford church during the lifetime of Bunyan's great-granddaughter, Hannah Bunyan, to pause whenever he crossed the town bridge and do homage to Bunyan's memory. This he did because, as he said, it was on this spot that Bunyan had suffered the pains of imprisonment for conscience' sake.

"Pilgrim's Progress"

Of a book so well known—it has been translated into over a hundred languages and dialects—little need be said. The pilgrimage that Bunyan describes is the pilgrimage of each one of us, and the people that he saw in his dream are the people that we encounter in our lives. As Dean Stanley said in 1874, when the Bunyan statue at Bedford was unveiled:

All of us need to be cheered by the help of Greathart, and Standfast, and Valiant for the Truth, and good Old Honest. Some of us have been in Doubting Castle, some in the Slough of Despond, some have experienced the temptations of Vanity Fair; all of us have to climb the Hill Difficulty, all of us need to be instructed by the Interpreter in the House Beautiful; all of us bear the same burden; all of us need the same armour in our fight with Apollyon; all of us have to pass through the wicket gate, all of us have to pass through the dark river; and for all of us (if God so will) there wait the Shining Ones at the gates of the Celestial City.

Next to the "Pilgrim's Progress," the most notable perhaps of Bunyan's books are "The Holy War," published in 1682, and "The Life and Death of Mr. Badman," which appeared in 1680. The former describes the losing and taking again of the town of Mansoul, and is an allegory of the conflict that is waged in the spirit between sin and religion. Here, as in the "Pilgrim's Progress," Bunyan shows us his own surroundings. Mansoul itself, with its

walls and gates and strongholds, and the army of Shaddai, with its captains in armour and its forces marching and countermarching, are all reminiscences of his soldiering days, while the remodelling of the corporation of Mansoul is little different from the changes that were taking place in Bedford while Bunyan was writing. "The Life and Death of Mr. Badman," with its intimate pictures of life in an English country town of the period, was doubtless not without influence on the English novel.

Another wonderful book is Bunyan's "Grace Abounding to the Chief of Sinners," published in 1666, the year of his short release. In this

THE AUTHOR OF "PILRIM'S PROGRESS"



John Bunyan, after the painting by Thomas Sadler (1685). This portrait and the drawing by Robert White are the only known authentic portraits.

he describes with graphic power his terrific spiritual conflict, which lasted several years. Here we read of his fierce struggle during this period, of his doubts and temptations, of his heights of joy and depths of despair, and find, too, many touching references to the little blind daughter, whom he loved so dearly. As a piece of religious autobiography this fine work is rivalled only by St. Augustine's "Confessions."

The Gentle Comb-maker

At the time of Bunyan's death several manuscripts were still unpublished, and it was through the devotion of his admirer, Charles Doe, that these were given to the world. Doe was a gentle little comb-maker, who had

a shop close to London Bridge on the south side of the river. So affected was he by Bunyan's sermons that he introduced himself by letter to the great man, and followed him, as Boswell followed Dr. Johnson, during the last three years of his life. How he came to publish Bunyan's books is best told in his own words:

In March, 1686 (he writes), as I was reading Mr. Bunyan's book, "Saved by Grace," I thought certainly this is the best Book that was ever writ or I read except the Bible, and then I remembered I had received a great deal of comfort in all of his Books. Some time after my assurance, and being under the sense of the peculiar Love of God, it came into my mind as I was upon my Stair-head what work I should do for God, and about the middle of the Stairs I reckoned that to sell Books was the best I could do, and by the time I came to the bottom I concluded to sell Mr. Bunyan's, and so I began to sell Books, . . . and also have been concerned in printing . . . "The Works of Mr. John Bunyan."

[See "John Bunyan, His Life, Times, and Work" (1887), by the Rev. John Brown (1887), and Lives by J. A. Froude (1886) and E. Venables (1888).]

THREE PRESIDENTS of a GREAT REPUBLIC

Woodrow Wilson, Who Controlled the Destiny of the United States During the World War, and His Successors in Office, Warren Gamaliel Harding and Calvin Coolidge

IT is a fact of which the American people are justly proud that the barefooted farmer's boy and the millionaire's son have an equal chance of becoming the first citizen in the land.

Most of the American presidents, however, have sprung from humble stock. Few very rich men have occupied White House, and many who became leaders of the republic rose from very humble positions. It would seem that the pursuit of dollars and preparation for the presidential career do not, as a rule, go hand in hand.

A governing class such as exists in other countries is unknown in America, although there is a governing type. It is moulded more by internal influences than by external surroundings. It emerges from the rut by virtue of the inherent qualities that stamp the man destined to rule. It survives all obstacles to the career of governing by the democratic quality of brains, by indifference to personal gain, as well as by conscientious study of the science of government.

Recent Presidents

Three recent presidents of America have been men of this type, although in no sense can they be said to conform to a standard. Each began life at what we should call the middle or lower class point. There is something



Woodrow Wilson making his inaugural address from a balcony of the Capitol, Washington, following his election to the presidency of the United States.

equally meteoric about the rise of these three men from comparative mediocrity to the most onerous post in a vast and complex continent, and something equally noble about their efforts to sustain the physical and mental arduous of their position.

Superhuman Efforts

Two of them died in harness, literally broken in body and nerve by prolonged overwork and anxiety. It is said that President Coolidge aged quickly after he took office in 1923. But the American people are realizing that they have asked too much of their presidents in the past, and it is unlikely that anyone in future will be called upon to attempt the superhuman efforts that undermined the health of Presidents Wilson and Harding.

"Do you know," the former once said to a friend, "there is so much expected of me that no matter what I accomplish they will say I have failed."

Unhappily, in one sense, President Wilson lived to hear the world pronounce the verdict of failure upon what was probably the greatest experiment in idealistic policy in history. He suffered the humiliation of being rejected by his own people for having striven to establish what he sincerely believed to be their own highest ideals, and if he had not proved himself, by his previous actions, to be

almost a saint he might have been denounced as a traitor to his country.

True to the type, which in some finer respects, however, he transcended, he never flinched from his duty as leader of the nation which he thought ought to lead the world, and he never lost faith. "The thing is right; it is right, and right will prevail," was his persistent answer to the critics who attempted to confound him.

So strongly did he believe that others would carry on the right after his death that, when the doctor forbade him to undertake his last tour in vindication of the League of Nations, he merely observed that there were things more important than his health.

Thomas Woodrow Wilson was born on the 28th December, 1856, at Staunton, in the state of Virginia. He was descended from a long and unbroken line of teachers and clergymen extending back to pre-emigration days and a mixed ancestry of Scottish and Irish blood. His father was a Presbyterian minister who had earned the highest honours of his profession and eventually became Professor of Theology at the University of Clarksville, Tennessee, which post he held until he had reached his seventy-first year.

Home Atmosphere

The atmosphere of Wilson's home was, therefore, evangelical and scholarly, although neither dogmatic nor academic. Before he could read he was allowed to listen to the family readings of Scott, Dickens, and other novelists. Later, he read and re-read the orations of Demosthenes. He showed little signs of brilliant scholarship either at local schools or at the Davidson College, South Carolina, to which he was sent in 1870, when his parents settled in Wilmington. On two occasions, however, he had to be kept at home owing to signs of mental strain. His record at Princeton University was not out of the ordinary. He did well in philosophy, ethics, history, political science, and English literature, but poorly in the modern sciences.

"Tommy," said one of his old college mates, "seemed to have an uncanny sense that he was a man of destiny. Now that I think of it he was always preparing himself, always looking

forward to the time when he might be called to high service."

Although people thought him a scholar, and not a very distinguished one at that, and he seemed to be developing the habit of a recluse—never seeking the society of others although ready to respond when approached—he was in reality feeling his way towards the life of a man of affairs. He began to study law, which he felt was the shortest path to public life.

When he was only twenty-three years old, and still an undergraduate, he gave sudden and unexpected evidence of the possession of brilliant intellectual gifts in the form of an

eighteen-page article contributed to the *International Review*, entitled "Cabinet Government in the United States." Few who read this able analysis of the science of government, revealing an extraordinary breadth of knowledge and grasp of complex problems, knew that it was written by a mere youth. It was Wilson's preliminary flourish, as it were to be backed up by years of study, and crystallized in deeds.

Practising Law

In 1882 Wilson began to practise law in Atlanta, but clients were scarce, and his real interest was in politics. "I found," he said, "that I could not be a lawyer and an honest politician at the same time. At least, I did not know how to then. I tried the next best thing, which was studying politics. I went back to school, where I undertook to learn some-

thing of the facts of government."

He returned to Princeton University as a professor, and taught jurisprudence and political economy for twelve years. His friends thought that the academic life had claimed him for good, but he was learning as well as teaching. In 1902 he was appointed president of the university, and the career he really wanted was delayed for another eight years.

Then came the dramatic leap from the cloistered seclusion of the college study into the arena of public life. In 1910 he was elected governor of New Jersey, and within a few months he had created a revolution in the life of that commonwealth. Finding himself in an atmosphere of stagnation and graft, and

IN HIS COLLEGE DAYS



Although young Woodrow Wilson showed little sign of scholarship, he won distinction in philosophy, history, and certain other subjects.

what the Americans call "gum-shoeing," he insisted upon straight dealing and open handedness. He fought the influential bosses who would have sent a corrupt politician to the United States Senate, and forced through an election Act making such practice impossible.

New Jersey citizens, who had anticipated but little of what lay beneath the mild appearance of the university professor, found themselves ruled by a man of iron will and extraordinary pugnacity. Within two years Wilson instituted so many vigorous and far-reaching reforms that his name and exploits echoed throughout America. In 1912 he was elected Democratic candidate for the presidency and was returned by a majority of 6,200,000 votes over Taft and Roosevelt.

His reforming zeal and his knowledge of scientific government now found full and richly deserved scope. During his first year of office he succeeded in lowering oppressive tariffs and in establishing the Federal Reserve Banks—the parallel of the Bank of England; he introduced some important anti-trust legislation, and secured an eight-hour day for American labour. He also made a great effort to effect the State purchase of American merchant shipping, but was defeated by private interests.

Handling of the Mexican Problem

In his handling of the acute Mexican problem of 1913-14, President Wilson gave a foretaste of his policy in regard to war. He was at once firm and pacifist. Recognizing the state of anarchy in that unhappy little country, he resolved to do all that was possible to help without actually letting slip the dogs of war. As a reprisal for an insult to the Stars and Stripes he ordered a blockade of Mexico, but he refrained from anything approaching a military demonstration.

The outbreak of the World War in August, 1914, placed President Wilson in a position which is historically without parallel. The leader of a great nation composed of a mixed population, he had to define a policy without offending racial sympathies. He had to stir the ingredients of the melting-pot until they coalesced into one substance.

He chose the wise course of appealing to abstract principles of justice and international probity. From the very beginning of the struggle he offered his services as mediator between the belligerents, and sought every possible avenue in order to bring about peace. When at last it became impossible for America

to remain impartial President Wilson was the first to recognize the inevitability of war, but he sacrificed no fundamental principle by so doing, and he gave a new dignity to the struggle by his declaration that this was "the war to make the world safe for democracy."

That there was no inconsistency between this pronouncement and his previous one that a nation could be "too proud to fight" is shown

IN THE GROUNDS OF WHITE HOUSE



President Wilson found little time for leisure during his terms of office as president of the United States. When in residence at the White House he would spend brief respite in the grounds.

by the fact that the American people re-elected him president in November, 1916, at a time when the controversy over America's part in the war had reached its highest point. He had read the will of the people and, when the crisis came, he clothed that will in a lofty idealism.

So ably did President Wilson conduct America's military part in the war and, at the

same time, sustain the flagging spirits of the nations allied against Germany, that he became for a time the dominating figure in international affairs. The whole world looked to him as the one man capable of healing the wounds of the sore and war-weary nations.

The end of the World War, in fact, raised President Wilson to the highest crest of his popularity, which makes it all the more ironical that his efforts to bring about what he believed to be a wise and just peace met with tragic failure. On his arrival in Europe he was fêted in Paris and entertained at Buckingham Palace.

PRINTER AND PRESIDENT



Before he entered public life, Warren G. Harding had become a newspaper proprietor. He bought the *Marion Star* for 300 dollars, and made it a prosperous concern.

The peoples of the world hailed him as their deliverer. He returned to America a broken and discredited man.

After all, there was a wider gulf between American and European interests than Wilson had foreseen. There were matters that had not been allowed for in the framing of the famous "fourteen points," matters which the great president with all his acumen and knowledge failed to understand. All that was humanly possible to bridge that gulf he did.

There remained, as the result of his labours, the realization of only one of his original purposes—the establishment of the League of Nations, in itself an achievement which any statesman might well feel proud to have accomplished during a short term of office.

He returned to find the American Senate indignant with him for having signed a Peace Treaty which it could not ratify. In the hope

of rallying the people to his side Wilson undertook a long and strenuous campaign in the States. He had scarcely begun the tour of vindication when he was stricken down by paralysis.

He recovered, but the American people were never able to recognize in him the man who had once held their utmost confidence. He became bitter and violent in his attacks upon his enemies. Some of his official acts, especially that of the sudden dismissal of Mr. Lansing, his secretary of state, caused universal mistrust and suspicion.

Refusal to Meet His Successor

He ceased to be president in 1920 and refused to meet his successor, President Harding, at the latter's inauguration, thus violating an old-established custom. Woodrow Wilson lingered for a little over three years, dying on the 2nd February, 1924.

After his death the American people paid full tribute to the man whose body and spirit had been broken in their service, and the whole world joined in recognition of his great gifts. He had failed to achieve many of his ideals, but the work of the idealist is never in vain, for there remains the basis of the structure upon which others can build.

The disagreement over the Peace Conference brought about a wave of opinion in favour of the Republican Party, and their candidate, Warren G. Harding, became president in 1921. Although differing from Wilson in policy he was in many respects a similar "type." He had the solid capacity for hard work and the indomitable will to carry out what he believed to be right doctrine which characterize all America's chosen leaders.

He was born in a farm-house in Morrow County, Ohio, on the 2nd November, 1865, of parents who had married young and under romantic circumstances, so that their eight children were brought up with great difficulty in an atmosphere of semi-poverty. Dr. Harding, the father of the future president, practised only in a small way, moving about from one district to another in search of a better clientele.

Reciting Long Poems When Four

When he was three years old, Harding mastered the alphabet in a single afternoon and begged to be allowed to read at once. Before another year was out he could memorize and recite long poems. His parents encouraged him, and he acquired very early the faculty of confidence in speaking before other people. "He was never embarrassed," his father says, "he never had stage fright; he was always ready, and this readiness has followed him throughout his career. It came natural to Warren to address a crowd."

As a boy he ran about the farm bare-footed, earning small sums for doing odd jobs. He did not wear a pair of boots until he was four, and then he went into the shop himself and made the purchase, obtaining "credit" in his father's name. At the village school he learned to make bricks in the playtime, and in Marion, to which place his parents moved when Warren was six, there are houses to-day containing many bricks made by him.

While still in his teens Harding often turned a good dollar by painting barns and outhouses for local farmers. One hot summer afternoon he, in conjunction with a chum, approached an individual noted for close-fistedness and offered to carry out a long overdue painting job.

"Do you paint by the day or by the job?" inquired the cautious farmer.

"Either way," replied Harding. "Two dollars each a day till we finish or twenty-five dollars for the whole job, we supplying the paint."

The farmer thought hard and decided that the second proposition would pay him best. Thereupon the amateur decorators got to work, and their brushes splashed rapidly over the barn walls. By noon the farmer altered his mind and said that he wanted the job done on a daily basis.

"All right," said Harding, "we always aim to please our patrons."

A Change of Plans

Work now proceeded at a surprisingly leisurely pace, and the farmer noticed that the painters seemed to be concentrating their efforts upon the shady part of the barn. A longish hour was taken over lunch, and afterwards the job slackened down until the irate farmer saw that, at this rate, he would be paying the boys 2 dollars a day for a month instead of 25 dollars for the job. After much grumbling he gave way, and the barn was painted by nightfall.

It was by cleaning boots for boys better off than himself and doing other menial jobs that Harding contrived to complete his education at the Central College, Ohio. Then he set about finding himself a livelihood, working for a time as a construction hand on the Toledo and Ohio Railroad, as a teacher, and then as a printer's assistant in the offices of the local paper.

He soon mastered the routine of journalism and proved himself an able reporter. At nineteen he was ready for any kind of news-

paper enterprise, and it so happened that an opportunity came his way.

The *Mirror* had recently vanquished an opposition paper, the *Marion Star*, which was put up for sale. "You ought to buy that," said the proprietor of the *Mirror* to Harding.

"But I haven't any money," said the young journalist.

"Get it, all the same," was the reply, "I'll back you."

And so Harding found out that the *Star*

SUCCESSOR TO THE WORLD WAR PRESIDENT



In 1920, as a result of the reaction against the Democratic Party, Warren G. Harding succeeded Woodrow Wilson as president of the United States. He was the first journalist to occupy this high position.

could be bought for 300 dollars, and borrowed the money from his father. Within two years the paper prospered, and Harding, as editor, had changed Marion from a Democratic to a Republican stronghold.

When he first began to edit the *Star*, Harding drew up the following rules for his staff, in the framing of which can be seen some of the sound principles upon which he worked throughout his career:

"Remember there are two sides to every question. Get them both."

"Mistakes are inevitable, but strive for accuracy. I would rather have one story exactly right than 100 half wrong."

"Be decent, be fair, be generous."

"In reporting a political gathering, give the facts; tell the story as it is, not as you would like to have it. Treat all parties alike."

"Treat all religious matter reverently."

In the uphill work of building up the circulation of the *Marion Star* Harding was much helped by his young wife, who took an active part in the make-up of the paper, reading all the proofs and personally delivering many of the copies.

Elected to the Ohio Senate

Harding remained in close association with the newspaper of his youth for nearly thirty years, but he early found wider scope for his ambitions. In America newspaper work is often a prelude to a political career. In Harding's case the soundness of his views, and the fairness with which he expressed them, soon obtained for him a large following. In 1899 he was elected to the Senate, or Upper House, of the Ohio legislature as member for Marion.

He made a deep impression upon the leaders of his party and he had few enemies. "Keep off other people's toes" was the slogan he adopted at the beginning of his political career. "You won't get big things done in the world without friends and well-wishers."

In 1903 he was elected lieutenant-governor of Ohio. Seven years later he lost the governorship owing to a split in the Republican Party and announced his intention of retiring from politics. But in spite of this set-back he was regarded as one of the strong men behind the scenes in the party.

The electoral processes in America are long and complicated, involving many ballots and the elimination of many "possibles." But in 1915 this process finally worked in Harding's favour and he was elected to the Senate of the United States.

Man With Many Friends

He took little part in debates, but when he did speak it was to pronounce level-headed, knowledgeable opinions upon matters concerning foreign relationships and finance. His journalism and "team-work" in the past bore fruit. He had many friends and he gradually felt his way to the time when he would be able to get big things done.

His opportunity came before he expected it, almost before he was ready, for in 1920, after only five years' experience of national government, the wave of reaction against the Democratic Party brought him to the fore as Republican president. He was the first professional journalist to reach this high position.

He assured himself popularity at once by the simplicity and candour of his utterances. He said to people who came to White House—which had remained closed during the last sad days of President Wilson's regime—

Mrs. Harding and myself do not want to be considered superior people. We are just folks like yourself who have come to the White House for a little while and will then go away. Whenever it is possible and consistent with my duties the White House will be open to you. One other thing: we have no little children of our own, but while I am president I want every little orphan boy and girl in the United States to look to me not so much as the big boss at Washington, but as a real father who cares for all the flock, and wants to leave America a better place for everyone than he found it—a better place to live in, to grow up in, and to fight the battle of life in.

Conference on Armaments

Devotion to duty and the honest attempt to disentangle America from the foreign policy of the previous administration marked Harding's presidency. The biggest event of his career was the successful conduct of the important Conference on Armaments at Washington in 1921, and it was during his administration that the American troops were withdrawn from the Rhine in 1923. He was not a reformer, but he was an extraordinarily able tactician, and he piloted America through the aftermath of the war—a job not, perhaps, so onerous as that of piloting her through it, but every bit as arduous.

So quietly and consistently did President Harding carry out his enormous task from day to day that it came as a shock to the whole world to hear that he, like his predecessor, had been broken on the wheel. He died on the 2nd August, 1923, six months before ex-President Wilson.

Harding was succeeded immediately by his close friend and associate, Calvin Coolidge, who announced that he intended to carry on his late chief's policy of stabilization and retrenchment. "Silence" and "discretion" were the avowed political slogans of this slim, sparse-featured young lawyer who lived with spartan simplicity, and whose devotion to duty and hard work made him yet another example of the true presidential type.

Farmer, Law Student, and Politician

Born on the 4th July, 1872, at Plymouth, Vermont, of farming stock, Coolidge early broke away from the land and studied law. All his life, however, he retained an interest in the practical affairs of farming, and he was actually engaged upon a difficult piece of tree-surgery on his father's estate when the call to the presidency came.

"It always seemed to me," his father once said, "that Calvin could get more sap out of a maple tree than any other of the boys round

WHERE PRESIDENT COOLIDGE SPENDS MOST OF HIS TIME



On the death of Warren G. Harding in 1923 the duties of president devolved upon Calvin Coolidge, who at the time occupied the post of vice-president. President Coolidge has the reputation of being an exceedingly hard worker, and it is said that he has no regular hours for anything except arriving at and leaving his desk.

here." In his boyhood he earned the reputation of never having been told twice to do a job. But when his father asked him if he would like to be a farmer he replied laconically, "No." It has been observed that President Coolidge more often says "no" than "yes."

Success in Law Scholarship

He was educated at Plymouth and Amherst College, Massachusetts, winning at the latter establishment a law scholarship and the first prize of a gold medal for the best essay outlining the principles of the War of American Independence. He then entered the legal profession in the offices of Messrs. Hammond & Field, at Northampton.

Both his employers held local administration offices, and in this way Coolidge early began to absorb the atmosphere of politics. The qualities that have won him the title of "Go Through Coolidge" became manifest in his work on committees and in assisting at local elections. He served as city solicitor for Northampton during the years 1901-4, and

was then elected chairman of the local Republican committee.

The first significant event in his political career was his election, by a precariously small margin, to the Massachusetts House of Representatives in 1907. Twelve years later he became governor of that state.

When in 1920 the National Republican Convention elected Coolidge to run with Harding, and subsequently appointed him vice president, it was generally supposed that the clever young lawyer had stepped into a side track and would be heard of no more, for such has been the fate of many previous vice-presidents.

Reply to an Unfounded Charge

He was so taciturn that people said he *could* not talk. When charged with this he replied, "I've usually been able to make enough noise to get what I want." As an instance of his extreme caution in official matters it is recorded that when an interviewer asked him where he sat at the Senate meetings—whether beside the president or the chief secretary—he thought

for a moment and then observed, "I think that had better come from the president himself."

One of his greatest anxieties, when vice-president, was provided by the offer of a residence, the upkeep of which he feared would cost him more than his means. The offer did not materialize and Mr. and Mrs. Coolidge continued to live in humble apartments, sending their two boys to a boarding school.

But this unostentatious living and quiet-spoken vice-president had already shown that he possessed other qualities besides those of diligence and conscientiousness. When he was

WITH HIS WIFE IN THE GARDEN



So full is the working day of Calvin Coolidge, the thirtieth president of the United States, that he has little time for recreation. A farmer in early life, he retains a warm corner for the land.

governor of Massachusetts the Boston police struck, and Coolidge called out the National Guard. His firm handling of a grave situation left a deep impression upon the minds of the party leaders, and when Harding died it was recognized that Coolidge was the man of the moment. What he lacked in genius he made up for by his remarkably intense and burning patriotism.

Perhaps more closely than either of his two great predecessors President Coolidge approximates to the average type of American president. He has the governing instinct, a mind trained to watch the best interests of his

country and a constitution capable of enduring the perpetual strain of office. His personal creed is best summed up in the following passage from one of his earliest public utterances:

Do the day's work. If it is to protect the rights of the weak, whoever objects, do it. If it is to help a powerful corporation better to serve the people, whatever the opposition, do that. Expect to be called a stand patter, but don't be a stand patter. Expect to be called a demagogue, but don't be a demagogue. Don't hesitate to be as revolutionary as science, or as reactionary as the multiplication table. Don't expect to build up the weak by pulling down the strong. Don't hurry to legislate. Give administration a chance to catch up with legislation. Men do not make laws; they do but discover them.

America's presidents tend more and more to regard themselves as heads of a gigantic corporation, and no man who is not prepared to carry out many more times the amount of work done by the average "big" business man in the States stands much chance of election, whatever his political ideals. It is the duty of the president to think out his country's problems, and he relies very much less upon subordinates than do the political leaders of other countries.

His Day's Programme

President Coolidge, whose inauguration as president took place on the 4th February, 1925, rises at 6.30 a.m. most mornings, and he is at his desk, after a short walk and breakfast, by 9 o'clock. Forty minutes later he has outlined his day's work, issued instructions to his officials, and examined his voluminous post. The rest of the morning is devoted to appointments, and the president often interviews from ten to a dozen people, all of them engaging his mind on widely different although equally important problems, until one o'clock luncheon. More often than not he carries off a caller to share his meal and continue the discussion.

From then until six o'clock the president divides his time between answering his letters, attending to State documents, and seeing more callers, few of whom are denied audience provided their business is of genuine urgency. It has been said of President Coolidge that he has no regular hours for anything except arriving at and leaving his desk. Marvellous powers of concentration enable him to return immediately to an interrupted task without having lost the threads of the matter.

It is not to be wondered at that America's presidents sometimes pay dearly for the honour bestowed upon them, and that the American people, with their keen appreciation of efficiency place a very high value on their services.

A POPULAR HERO of the 16TH CENTURY

Sir Walter Raleigh's Efforts at Colonization, His Rise and Fall from Favour at the English Court, and His Tragic End on the Scaffold

THE popular conception of Sir Walter Raleigh is probably that of a somewhat arrogant courtier, whose reputation rests on his having introduced tobacco into England, but to think of him in this light only is to add one more injustice to a much-wronged man. Strictly, too, the first Englishman to adopt smoking was not Raleigh but Thomas Harriot, one of his Virginian settlers.

Sir Walter may, however, be said to have done more than any other man to popularize the smoking habit in this country. At first it was condemned as savouring of barbarism and degeneracy, and when Raleigh, the immaculate, appeared at court with his silver pipe between his teeth, nobility held up its hands in pious horror and protested that he was imitating the manners and customs of the savage. Not until the medicinal virtues of tobacco had been loudly praised did smoking become really fashionable.

Raleigh's first experiment in smoking ended so disastrously that no one could have been surprised if, there and then, he had renounced the habit for ever.

Seated alone in his study one day, he lit his pipe, and was poring over a book, when the door opened to admit a man servant bearing a tankard of ale. The man's horror at what he saw could not be measured in words. With a cry of alarm, and with eyes dilated with fear, he threw the contents of the tankard into Raleigh's face and rushed for help. Not for a long time could he be persuaded that his master was not on fire.

Raleigh's title to world fame does not rest on the success of his efforts to get his countrymen to smoke tobacco and to cultivate potatoes; these were but trivial incidents in his adventurous career—but on his laying the foundation

stone of England's colonial empire. He it was who first visualized a new and greater England beyond the seas. He it was who sought to benefit humanity by colonizing that New World, which others thought of only as an opportunity for plunder.

Through the cruellest misfortune his first colonizing ventures failed. But he paved the

way for others, and, before he died, he had the satisfaction of knowing that his noble ideal had been realized in the establishment of the first lasting colony at Virginia.

For keenness of intellect and breadth of imagination Raleigh had no superior among the illustrious men of his time. He was a brilliant example of the many-sided genius of the heroes of the Elizabethan period. His versatility was amazing. At different times during his career he was soldier, sailor, statesman, explorer, historian, poet, and chemist. His facile adaptability and remarkable self-confidence and vitality enabled him to tackle each of these phases of activity with conspicuous success. Idleness was foreign to his restless nature.

Even during his long imprisonment in the Tower he found opportunity to study chemistry and to apply his literary talents to compiling a "History of the World."

When he mounted the scaffold in 1618, to undergo the preposterous sentence that had been passed on him nearly fifteen years before, it was suggested that he should turn his face to the east. His reply was characteristic: "What matter," he said, "which way the head lie, if the heart be right?"

For three hundred years historians have been trying to penetrate the veil of mystery which shrouds the true character of Raleigh—to discover whether his "heart was right."



The famous Elizabethan sailor and courtier was born at Hayes Barton, in Devonshire, the county that has given so many great sailors to the British navy.

In spite of a profusion of biographical material, no one has yet been able entirely to exonerate him or condemn him for the part he played in the intrigues that finally led to his ruin and to his death on the scaffold. His life is a story of lost opportunities—lost, so it appears, through weakness of character or indiscretions for which the student of his career is almost totally unprepared.

Defects of His Character

What he lacked more than anything was true friendship and the faculty for making friends. Those he had were of the lukewarm variety, who deserted him in his hour of need. He commanded respect where he failed to inspire confidence. Even when at the height of his power, he was Elizabeth's favourite, he was never consulted in important state affairs. There was a hint of vacillation about his character which gave rise to mistrust, and which prompted Elizabeth to refer to him playfully as 'Water'.

But, with all his faults, Raleigh was a hero and a patriot. His genius, his wealth, and his life were devoted to the service of his country. He was one of the rocks on which the Spanish bid for world supremacy was shattered. He strove with Drake, Hawkins, Grenville, and others, to make Britain supreme on the seas, and he will be remembered with lasting gratitude as the apostle and advocate of the British colonial empire.

In an era of excitement and discovery, and in an atmosphere of intense hatred of Catholic Spain, Walter Raleigh made his first appearance in this troubled world at Hayes Barton (now a farmhouse), in Devonshire, about four miles from Sidmouth. The year of his birth has not been fixed with certainty, but is generally accepted as being 1552.

Tales of High Adventure

Among his neighbours were many sea adventurers. These spoke of little but the rich and wonderful new lands that were being discovered on the other side of the Atlantic, and his boyish imagination could not have failed to be excited by the stirring tales of adventure poured into his willing ears during those early impressionable years.

How eagerly must he have interrogated those hardy Devon seamen. The manners and customs of the natives, the climate, the fertility of the land and the possibility of starting a white settlement—these must have been in the forefront of the questions he asked. With his mind still dwelling on the New World and its vast possibilities he went up to Oxford University to complete his education. There he drew attention to himself through his great gift of oratory, but he does not appear other-

wise to have distinguished himself, and he did not take a degree.

His love of adventure and also his hatred of the Catholics led him in 1569, after a brief residence at the university, to leave Oxford for France, where he took part in the civil war on the side of the Huguenots as a gentleman volunteer. Not for several years did he recross the Channel, and when, finally, he returned to England, he found everyone talking excitedly about the remarkable voyages accomplished and the fresh discoveries that had been made by Drake and others. Soon, like many another of his spirit at that time, he was gazing seaward, and in 1578 he set out on his first voyage of discovery, accompanied by his half brother, the gallant Sir Humphrey Gilbert.

Encounters a Spanish Squadron

Any hopes that he may have entertained of emulating the feats of Drake were soon destroyed, for early in the voyage he had the misfortune to encounter a Spanish squadron eager to avenge some of the insults that had been heaped on King Philip's head during the preceding five years. The end of an unequal fight saw Raleigh limping home in a vessel that could scarcely be kept afloat, and vowing vengeance on the Spaniards.

Disappointed at the failure of his first venture, but quite undeterred by his ill luck, Raleigh was soon seeking a fresh field of activity. When news reached England that Philip of Spain had landed a small army in Ireland to support the rebels in that country, he put on his armour and joined the forces under the command of Lord Grev de Wilton. It was an unexpected opportunity for revenge that was too good to be missed.

The battle with the Spanish invaders was short and sharp, and after a successful attack on Smerwick in County Kerry, the whole of them were put to the sword by Grey. Some of the blame for this much criticized act of the English commander was afterwards laid at Raleigh's door by his detractors but, although he took part in the slaughter, he clearly acted under orders.

Ambushed and Outnumbered

Several times during the campaign Raleigh was commended for his resource and bravery. On one occasion, when he was scouring the country with a small party of men, he was ambushed on the banks of a river by a body of rebels, who outnumbered his little force by nearly twenty to one. Raleigh, who was a little way ahead of his followers, succeeded in fording the river, but no sooner had he reached safety than a cry of distress rang out from behind.

SEEING HIS FUTURE IN THRILLING STORIES OF THE PAST



In this magnificent painting by Sir John Millais the future favourite of the Elizabethan Court is hearing glowing stories of sea life from a sailor who has taken part in many a stirring adventure. His companion listens rather stolidly to the stories, but Raleigh, though sceptical of the sailor's narrative, weaves into it a vision of the life that lies before him.

One of his men was in difficulties in mid-stream. Heedless of his own safety, the gallant commander plunged into the river and brought the man to the bank. Then he calmly awaited the coming of the rebels, prepared to defend the rest of his party from attack. In face of such unexpected opposition the rebels took to their heels. For his services in the Irish campaign Raleigh was appointed captain of infantry.

Leaps from Obscurity to Fame

As many reputations were marred as made during hostilities in Ireland but to Raleigh the fighting proved a godsend. In the course of a few months he had leapt from obscurity to fame. First his bravery and leadership, and then his fearless criticism of those responsible for the administration of Ireland, attracted attention in London, and the Court of Elizabeth was soon conjuring with his name.

When Raleigh, in gorgeous and extravagant attire, made his first bow at Elizabeth's Court, the queen's coterie of special friends grew uneasy. This fine figure of a man—tall, dark, and handsome, with curly hair, blue eyes, and splendid features—this arrogant captain with the great fighting reputation would, they said, quickly win his way into favour with Elizabeth, to the exclusion of themselves. Nor were they wrong, for Raleigh made rapid progress.

His Commanding Personality

Splendidly endowed by nature, he had a commanding personality, a pleasant, courteous manner, an incomparable wit, and a remarkable gift of eloquence, characteristics which added lustre to Elizabeth's Court and made an instinctive appeal to her vanity. On this occasion, at least, he made full use of his opportunities. The story of how Raleigh on

meeting the queen one day, spread his rich cloak upon the muddy ground so that she could walk over it, illustrates at once the exaggerated gallantry of that age and his aptitude for improving the occasion.

His sudden rise to royal favour aroused jealousy at Court and led to his becoming generally unpopular. In course of time he became "the best-hated man in England," but he paid little heed at this period of his life to public opinion. He had big schemes in mind, and he knew that, when the time came to put them into operation, he had more to gain from Elizabeth's sympathy than from that of the masses.

So, sacrificing other interests, he kept himself in the good books of the sovereign. Numerous royal privileges were extended to him. Huge estates that had been confiscated for the Crown were handed over to him, and soon he became one of the largest owners of land in the country.

In 1584 his restless energy was diverted into yet another channel, and he entered Parliament as a member for Devonshire. Early in the same year he was knighted. Meanwhile his influence with the queen increased by leaps and bounds, and the year 1586 saw him brought into even closer attendance on her by being appointed captain of the guard. Mention has been made of the fact that he was rarely, if ever, consulted in important affairs affecting the welfare of the state, but he occupied several responsible positions at this time, and with conspicuous success.

Starts Colonizing Project

It was during the year 1584 that Raleigh decided that the time was opportune for pushing forward his great project of colonizing the New World. His first step was to apply for a royal charter, authorizing him to discover and occupy any lands that were not at that time in the possession of a Christian nation. This he obtained with little difficulty, but he was expressly forbidden to lead his expeditions in person. Raleigh was keenly disappointed, but to quite disregard the queen's wishes and throw this hard proviso to the winds would have placed his plans in

jeopardy, and so he accepted the blow with the best possible grace.

A small expedition, equipped at Raleigh's expense, shortly afterwards made its way to the coast of North Carolina and explored new lands, which, by Elizabeth's desire, were named Virginia. In the following year Raleigh dispatched a still larger expedition under Sir Richard Grenville, with the intention of forming a colony, and nearly a hundred men, with Ralph Lane as governor, were left on the coast as the first white settlement.

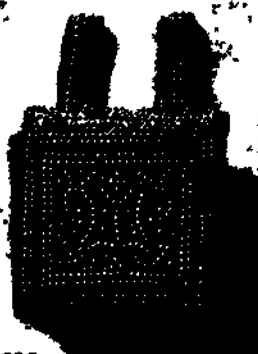
Unhappily, Raleigh's lifelong ambition was not yet to be fulfilled. The natives, on whose friendship the success or failure of the venture largely depended, abandoned the colonists. Food ran short, and it was not long before a signal of distress was hoisted. Grenville was instructed to take out fresh supplies, but, before he arrived, Drake paid the colony a visit, following his famous attack on the Spanish strongholds of San Domingo and Cartagena. In dire straits, Raleigh's much reduced colony begged Drake to take them home, and when, a few days later, Grenville arrived with relief stores, he found that Virginia had been abandoned. Thus Raleigh's first attempt to colonize the New World ended in dismal failure.

Undeterred by Failure

It says much for his strength of purpose and determination that he would not allow this initial disappointment to deter him. Indeed, it galvanized him into greater activity, and, without regard to cost or trouble, he equipped and dispatched several more expeditions during the next few years. All of these, however, possibly through lack of his personal guidance and the inspiration of his own indomitable spirit, ended in failure. But Raleigh had given a lead to the world which sooner or later it was bound to follow. These early attempts to start a colony in Virginia had cost him no less than £40,000.

The war with Spain put an end to his colonizing attempts for a time. At this period in her history the country needed the counsel of men with the ability, energy, and fighting capacity of Raleigh, and he was appointed

HIS PIPE-CASE--



The pipe-case of Sir Walter Raleigh, who introduced tobacco into England.

--AND HIS PIPES



This is the same pipe-case opened out and showing some of the pipes that Raleigh used.

to serve on the Council of War. As vice-admiral of Devon, it also fell to him to organize the defences of Plymouth and other places in the west country where invasion was practicable.

When, in 1588, first news of the approach of the invincible Armada was received, Raleigh was in Ireland. With all possible speed he crossed to England and joined a volunteer squadron, which actively assisted Howard and Drake in administering defeat to the Spanish fleet. An intensive war against Spanish shipping succeeded the destruction of the Armada, and the next year or two found Sir Walter engaged in privateering expeditions.

Result of His Secret Marriage

His secret marriage in 1592 with Elizabeth Throgmorton, one of the queen's maids of honour, marked the beginning of his fall from power. The queen was not slow to show her resentment of her favourite's action, and her indignation at what she considered to be a personal affront soon found expression in her ordering Raleigh to be imprisoned in the Tower.

In disgrace at Court, Sir Walter regained some of his popularity in the country, but there is no knowing how long he might have been kept in captivity at Elizabeth's pleasure had it not been for the timely return of his fleet after one of the most successful expeditions ever dispatched from this country. Its arrival at Dartmouth, laden with riches valued at half a million sterling, served to remind England that Raleigh was one of the great men who had defended her in her hour of need, and bowing to public opinion, the queen released him from the Tower.

Raleigh tried by every means in his power to regain his lost position and influence at Court, but the queen's advisers, whose jealousy he had aroused, played on her wounded vanity, and all his efforts to obtain forgiveness for his indiscretion failed. He, thereupon, determined to fulfil a long-cherished ambition to lead an expedition to Guiana in search of the mysterious El Dorado. Associated by fable with untold riches, transported thither by fugitive Peruvian princes, its alluring magic had tempted thousands of bold adventurers, chiefly from Spain and Portugal, to cross the Atlantic in search of fortunes.

Belief in El Dorado

There were a large number of Englishmen besides Raleigh who were convinced of the existence of this El Dorado, and even some of the most cautious men of note were not above risking capital in an expedition to discover the land of gold.

Raleigh had long been among the most

ardent of those who were anxious to disprove the Spaniard's self-assumed right to the monopoly of all unconquered lands, and here was a golden opportunity for him to demonstrate to the world that the spirit of adventure was still alive in England. Apart from this, it afforded him a chance of restoring himself in Elizabeth's favour. Also, a rapturous welcome awaited the man who could return to England with the key to El Dorado in his pocket.

THE SEA-ROVER AND HIS SON



Having fallen into disfavour, Raleigh was sentenced to death for treason. He was reprieved, however, and imprisoned in the Tower, where his wife and son joined him.

With plenary powers to engage in operations against the Spaniards, Sir Walter Raleigh left Plymouth on the 6th February, 1595, and, crossing the Atlantic to South America, sailed up the mighty river Orinoco. Raleigh's intention was to enter Guiana by making a passage of this river, and, with this in view, he had dispatched a vessel in advance, instructing the captain of the craft to reconnoitre that part of the coast and secure what information he could about it.

A pitiless sun added to the normal discomforts of the voyage and, to make things worse, provisions ran short. The fish in the river and the fruits on the river banks often stood between them and starvation. In the end after much suffering and with his mission unaccomplished, Raleigh was forced to turn back owing to the heavy rains. Further exploration was impossible and he had not sufficient stores and equipment to remain in that part of the world until the next dry season.

At First Regarded as an Impostor

In his dealings with the natives Raleigh showed a large-hearted sympathy which imme-

diately won their confidence, and his conversations with them, together with his general observations, confirmed his belief in the existence of a treasure-city. On his return to England, however, his story was regarded with suspicion and in some quarters was openly disbelieved. For months, like James Bruce, the Abyssinian traveller, he was looked upon as an impostor, and it was not until the publication of his book, "The Discovery of Guiana"—a work of great literary skill—that fickle public opinion once more veered round in his favour.

Encouraged to further enterprise, Raleigh dispatched another expedition to Guiana. After

exploring new land, its leader, Lawrence Keymis, reported that he had found the passage to the great treasure-house barred by Spaniards. For twenty long years the mythical gold mine of El Dorado was to be held like a tempting bait before Raleigh's eyes. Finally, it was to lure him and the faithful Keymis to destruction.

In 1596 Raleigh's undiminished zeal for adventure found still further outlet in an expedition against Cadiz, under Howard and Essex. During the battle with the Spanish fleet in Cadiz harbour Raleigh was severely wounded but, determined to take part in the landing operations which followed the defeat of the Spanish galleons, he was carried ashore on his men's shoulders. In the course of his varied career he had more enemies than

friends, but never could he be accused of cowardice.

As vice-admiral of the fleet, he continued to take an active part in the campaign against the Spaniards. At first he enjoyed terms of friendship with Essex, but the latter afterwards revealed himself as a powerful antagonist. Their relations were not improved when one day, without awaiting orders from Essex, Raleigh made a brilliant dash on Fayal, one of the Azores and captured it.

Later, after being appointed governor of Ireland, Essex was found guilty of treason, and suffered death on the scaffold. Many

SOLDIER, SAILOR, AND STATESMAN



Soldier, sailor, scholar, and statesman, Raleigh contributed greatly to the history of his time. One of his greatest ambitions was to colonize the New World.

people were ready to believe that Raleigh had been the main instrument of his death, but the only criticism that could reasonably be offered against him was that he declined to use his influence to obtain a mitigation of the sentence.

The accession of James I, in 1603, marked the beginning of Raleigh's decline. One by one his many offices and privileges were taken from him, and, in the end, accused of having taken part in an intrigue to prevent the king's accession to the throne, he was arrested and cast into the Tower. Verily had the wheels of fortune turned against him. The arrogant, handsome courtier, who had won

his way to one of the foremost positions in the land, was now a prisoner, awaiting trial on the despicable crime of treason. Broken in spirit, oppressed by his many enemies, befriended by none except his loyal wife, he viewed the future with abject despair.

Despairing Message to His Wife

"I am left of all men who have done good to many," he wrote to his wife. "All my good turns forgotten; all my errors revived and expounded to all extremity of ill. All my services, hazards, and expenses for my country—plantings, discoveries, fights, councils, and whatsoever else—malice has now covered over; I am now made an enemy and traitor."

Abused on all sides, and insulted by the mob in the streets through which he was unceremoniously taken, Raleigh was tried at

Winchester in November, 1603, for plotting "to deprive the king of his crown and dignity; to subvert the government and alter the true religion established in England, and to levy war against the king." After a farcical trial, during which Raleigh pleaded in vain to be faced with his chief accuser, he was found guilty and sentenced to death.

Judged by the present-day standards of justice, the verdict was a preposterous one, as the evidence against Raleigh was flimsy and contradictory. Exposed to the violence of the attorney-general, however, the prisoner had a hopeless task. Throughout the trial, and under the greatest provocation, he assumed a dignified bearing and calm demeanour that rallied public opinion to his favour in a truly remarkable manner.

His Popularity

"Never was a man so hated and so popular in so short a time," it was said. A former enemy of Raleigh's remarked: "When the trial began I would have gone 1,000 miles to see Raleigh hanged: before the trial closed I would have gone 1,000 miles to save his life."

The pioneer builder of England's empire was not, however, to die yet. Within a few hours of the time fixed for his execution he was reprieved, and condemned to imprisonment for life in the Tower. For twelve years he languished in his prison, at times buoyantly hopeful that the future would vindicate him and grant him an opportunity to crown his

glorious work: at others, pessimistic and despondent. The several privileges he enjoyed made life moderately bearable for him, although nothing could compensate him for his loss of freedom. For a good part of the time his wife and son lived with him, and he was allowed

ATTACKED BY THE NATIVES OF VIRGINIA



Raleigh's efforts to establish a colony in the New World proved fruitless, as the colonists were abandoned by the natives and could not obtain food. During one of Raleigh's expeditions a member of his crew was attacked by the natives and had a narrow escape from death.

to convert a disused "hen-house" into a laboratory, where he spent long hours in chemical research.

Many of the great poets and scholars of the day visited him, and during the latter part of his detention, when his son's education made less claim on his time, he began to write a "History of the World." This great work

is said to have been prompted by Prince Henry, the king's son, who was a staunch friend of Raleigh's and a frequent caller on him. On many occasions the prince interceded with his father on Sir Walter's behalf, and the latter had great cause to regret the untimely death of his young friend.

In connexion with Raleigh's work as a writer, it is worthy of note that he was an able poet; and one of his claims to the gratitude of his country is that he presented Edmund Spenser to the queen, and induced this master poet to publish his *Faerie Queene*. Spenser's letter to Raleigh, explaining the intention of

that he was about to undertake the impossible. Nothing was more unlikely than that the Spaniards would quietly allow an Englishman to carry out an expedition against a place whose secret they had zealously guarded for years past—and King James saw to it that Madrid was notified in advance of Raleigh's intentions.

The ill-fated expedition left the Thames in March, 1617. From the first, Raleigh was dogged by misfortune, but, while he was in command, he strove manfully to adhere to his pledged word. Some distance from his goal he became seriously ill, and, in a last desperate attempt to fulfil his ambition, he dispatched an advance party, including Keymis and his own son, to discover the gold mine.

This was a fatal move. Without the benefit of his restraining influence the party became embroiled in a skirmish with the Spaniards, which resulted in the death of Raleigh's son. As an act of revenge, a Spanish settlement was razed to the ground, and, when he heard this, Raleigh knew that the last slender hope of saving his head had gone. Reprimanded by his chief, Keymis destroyed himself, and the remainder of the expedition with its chastened leader made its way home.

Defends His Conduct

Raleigh landed at Plymouth in June, 1618, fully realizing what was in store for him, and, without offering resistance, he was arrested and taken to London. Defiant to the end, he found time to defend his conduct, with characteristic vigour, in his "Apology for the Voyage to Guiana," a book that did much to help the public to form a true estimate of his character. King James was at first

hard pressed to find an excuse to put his alleged enemy to death, but he was advised that the original charge and sentence still stood, and, under this, Raleigh was publicly executed in front of Parliament House on the 29th October, 1618.

His appearance on the scaffold moved a large crowd to pity. Turning to the executioner, he felt the edge of the axe and remarked jocularly, "This is a sharp medicine, but it is sure cure for all diseases." A few minutes later he had breathed his last. His brave wife survived him by 29 years.

[See Lives by M. A. S. Hume (1897), Sir R. Rodd (1904), and W. Stebbing (1899), and Raleigh's Works, including Lives by Oldys and Birch (8 vols., 1829).]

THE CLOSE OF AN ADVENTUROUS LIFE



In the public prison of Westminster Sir Walter received the last sacrament from Dean Tounson. His adventurous career was brought to an end by his execution on the 29th October, 1618.

the work, is often published as a preface to the poem.

As time went on, the hero of Virginia became more and more the object of public sympathy, and frequently crowds thronged the Tower eager to catch a glimpse of him at exercise. Not until March, 1616, did he obtain his release, and then it was conditional upon his making a further attempt to discover the rich mine in Guiana. Under the direst penalties he was forbidden to act in any hostile manner against the Spaniards.

Overjoyed at tasting the sweets of freedom once again, Raleigh was in the mood to promise anything, but, if he had given a moment's reflection to the position, he must have seen

Two REFORMERS of the BRUSH

How Holman Hunt and His Band of Brothers Got Back to Truth and How G. F. Watts Sought to Leave the World Better than He Found It

THE middle of the nineteenth century was a most important period in the history of British art, for it saw the beginning of a revolution against convention and the spreading of new doctrines which were destined to affect profoundly the thoughts and outlook of artists, and to change almost entirely the character of their art.

In the forefront of this period stand two artists who, though very different in character, were both reformers. The first, William Holman Hunt, worked to remove the shackles of convention with which the art of his time was pinioned; the second, George Frederick Watts, worked in the cause of humanity, and, though sharing some of Hunt's ideals, he was more concerned about the well-being of man's soul and the elevation of his fellow creatures than about the debased state into which art had sunk. Naturally, therefore, the pictures of the two artists were very different in type, but as both were striving towards practically the same goal, we can make very interesting comparisons between their interpretations of life and of art.

William Holman Hunt was born in London on the 2nd April, 1827. He came of good stock, though his family had suffered considerable financial misfortunes. An ancestor on his father's side had espoused the Cromwellian cause, bearing arms against Charles I and later fighting for Protestantism in Holland. Although, however, he returned to England with William III, the family failed to recover the property it had forfeited. Holman Hunt's father was manager of a City warehouse, a somewhat unremunerative position, but he had without doubt inherited tastes which were superior to those of the class in which he moved. Passionately fond of books and pictures, he encouraged his son to draw and to paint, but

only as an amusement, believing that a mercantile career was far more likely to bring him success than the profession of an artist.

Thus, when only twelve and a half, Holman Hunt was taken from school and placed in an office in the City, where he worked for nearly four years. Young as he was, however, his spirit must have chafed at the restraint and the monotony of this work. He had the stuff of

the real artist in him; every minute of his spare time was occupied in drawing and painting and—we can well believe—in endeavouring to persuade his father to let him give up commerce so that he might study art.

Eventually, as so often has been the case where there is genius to support argument, the will of the son triumphed over that of the parent, and, at the age of sixteen, he began an independent career as an artist.

He was wise enough to know, however, that it was impossible for him to succeed in any great measure without adequate instruction, and this was to be obtained only at the Royal Academy schools. His means were limited, but he managed to enter the schools eighteen months after abandoning a commercial career.

It was while studying here that he first met John Everett Millais. The meeting has been described in

the article on the latter artist. Millais was then but a lad of fifteen years, but even at that time superior in artistic talent to Hunt, whose progress through the schools was of the slow and painstaking order. Yet from this meeting sprang the germ of a friendship that was to last throughout life, and which was destined to have a profound influence on British art.

From 1846 to 1848 Hunt pursued the ordinary life of a young artist. He sent three pictures to the Royal Academy: "Hark!" in 1846, followed by "Dr. Rochecliffe performing

THE SINS OF NINEVEH



"Jonah," by G. F. Watts, in the National Gallery, London. The prophet denounces the sins of Nineveh. On the walls are emblems of vices.

Divine Service in the Cottage of Joceline Joliffe at Woodstock," and "The Flight of Madeline and Porphyrio." None of these was marked with any great originality or promise of the greater things that were to come.

It was in 1848 that there came the first fruit of his meeting with Millais. For some time the two young artists had been dissatisfied with their own work and with that of their fellows. The art of Ford Madox Brown and also, perhaps, of Dante Gabriel Rossetti, made them realize the state of decay and sheer imitativeness into which British art had sunk. Hunt and Rossetti met in Millais' studio and talked

ON THE THRESHOLD OF HIS CAREER



William Holman Hunt as a young man, painted by himself. It was fortunate for art that Hunt left his City office when he was sixteen years old.

the matter over. The result was the formation of what has come to be known as Pre-Raphaelitism. All three decided that they had to get back to truth in art, that all their workmanship should be sincere, and that their representations of nature and incidents should be as exact as possible.

To this end they banded themselves into a brotherhood—almost a sort of secret society—and resolved each to paint a picture, to be sent to the Royal Academy, which should embody their new principles. After their names were to be put the mystic letters "P.R.B.," the meaning of which was not to be revealed to anybody. How the secret of the Pre-Raphaelite Brotherhood eventually leaked out, the scorn and

abuse that was poured on the heads of its originators, and the eventual triumph of its principles and the conversion of other artists, is one of the most interesting chapters in the history of British art, and has been described in the article on Millais.

In this movement Hunt played a very prominent part, and his next pictures, "Rienzi vowing to obtain Justice for the Death of his young Brother" and "A Converted British Family sheltering a Christian Missionary from the Persecution of the Druids," were typical examples of the new style. The first realized a hundred guineas, the second £150. They were followed in 1851 by "Valentine protecting Sylvia from Proteus," which may be described as the finest of his earliest works, and which earned a prize at Liverpool. What is more, it was highly praised by Ruskin in letters to *The Times*. Ruskin declared that as studies of drapery, and, indeed, of every minor detail, there had been nothing in art so earnest and complete since the days of Albert Durer.

Difficulty in Selling His Pictures

The storm of abuse which greeted the exposition of the principles of Pre-Raphaelitism affected Hunt profoundly. The picture-buying public was frightened by the vitriolic outpourings of the critics, and, despite the continued praise of Ruskin and a few others, Hunt found great difficulty in selling his pictures. He became so much discouraged that he talked seriously of giving up art and learning farming, with a view to emigration. Fortunately, however, wiser counsels prevailed, and, heartened by Millais and Rossetti, he continued at his labours, being rewarded with prizes of £50 and £60 at Liverpool and Birmingham. Although in straitened circumstances, it was the appreciation rather than the monetary value of these awards that gave him the courage to continue.

In 1854, came his first real success: "The Light of the World." This noble picture at once created a profound effect. Indeed, it is not too much to say that its effect was greater than that of any other religious painting of the nineteenth century. A writer of the period says: "For the first time in England a picture became a subject of conversation and general interest from one end of the island to the other, and, indeed, continued so for many years."

Most Popular Religious Work

Even to-day, more than seventy years since its painting, it is the most popular religious picture from the brush of any British artist, and the number of reproductions that hang in British homes can be counted in tens of thousands. Despite its obvious allegorical defects, it is still a great piece of work. "The Light of the

World " was purchased by Mr. Richard Combe and presented by his wife to Keble College, Oxford. Unfortunately, the quality of paints used by Hunt in this work was inferior, so some of the colour has suffered severely with the passing of time.

The sale of "The Light of the World" enabled Hunt to carry out an ambition which had possessed him for some time. This ambition was to go to Palestine, and, surrounded by the people and customs of ancient Judaea, to portray incidents from Scripture.

He left England in 1854, and the first result of his journey was the now celebrated picture, "The Scapegoat." This shows a single goat, cast out from the flock, standing on the shores of the Dead Sea. In the background are the mountains of Edom, bathed in the beautiful purple light of evening. This picture was exhibited at the Royal Academy in 1856, along with other eastern landscapes by Hunt.

His next picture proved to be one of the most successful as well as the most elaborate of his works. It was called "The Finding of our Saviour in the Temple," and it took several years to complete. This was not because the artist worked slowly—though it is true that he never had the habit of rapid execution—but because of a variety of causes, including the fact that Jews were forbidden to act as models. This decree was, of course, afterwards revoked. Like "The Light of the World," this last picture caused a considerable sensation, and attracted thousands of visitors when exhibited in London and other large cities of England.

It was purchased by a dealer for £5,500 and hangs to-day in the Birmingham Art Gallery.

For the next thirteen years, Hunt produced chiefly pictures of eastern scenery, and, on his return to England, a few portraits. None of

"THE LIGHT OF THE WORLD"



This picture, representing Christ knocking at the door of the human soul, was Holman Hunt's first success. It is probably the most popular religious picture ever painted by a British artist.

these is particularly noteworthy, and it is not until we come to the year 1873 that we find a really striking example of his work. This was called "The Shadow of Death," and represents our Lord standing in the carpenter's shop at the close of the day's work. He is stretching his arms wearily, and the rays of the setting sun cast a shadow on the wall—the shadow of a man crucified. Mary, kneeling, looks up with startled eyes at the shadow, as if she had a premonition of what was to come. The picture is typical of the Pre-Raphaelites teaching—simplicity, truth and fastidious attention to detail being its dominating characteristics.

Although Hunt occupied most of his time on pictures of a religious character, he proved that he could execute delightful work of a totally different nature. His picture of "A Tuscan Girl," which he sent to the Grosvenor Gallery in 1867, is charming, as are the pigeons in "The Festival of St. Swithin." But his great picture was "The Triumph of the Innocents," which

he began in Jerusalem in 1875, having returned thither after an absence of two years. The subject of the picture is imaginary, showing the Holy Family during their flight into Egypt, attended by a procession of the Holy Innocents, who, illuminated with unearthly light, march along the waters of life.

This work was delayed by a series of accidents. The artist, on his arrival in Jerusalem, waited for a supply of materials, but waited in vain. Months passed, and at last, in despair, he procured locally a piece of linen on which he started to paint, and on which he almost completed the picture. But on his arrival in England, he found that the linen had been so unsuitable that the picture had to be abandoned, and the unfortunate artist was compelled to begin all over again.

His second effort differed in many respects from the first, and was completed in 1885. In

AT THE HEIGHT OF HIS FAME



Holman Hunt's ambition was "to serve as high priest and expounder of the excellence of the works of the Creator," and this high aim he succeeded in achieving most worthily.

the meantime the original picture was relined and treated so skilfully that Hunt was able to complete it also. Thus it comes about that there are two pictures of "The Triumph of the Innocents," one of which now hangs in Birmingham and the other in Liverpool.

Of his later works, the most interesting are "May-Day, Magdalen Tower," and "The Miracle of Sacred Fire in the Church of the Sepulchre, Jerusalem." In order to paint the former, he rose at dawn, day after day for many weeks, and climbed to the top of the tower to study the sunrise.

Hunt passed away on the 7th September, 1910. Until his death he had adhered to his

resolution of keeping aloof from the Royal Academy, but he was not without official recognition. The degree of D.C.L. was conferred on him by the University of Oxford, and, after the death of G. F. Watts, he was honoured with the Order of Merit.

Holman Hunt's claim to fame lies firstly in his connexion with the revolutionary movement known as Pre-Raphaelitism, and secondly in that he has embodied in art, as no other painter has done, the typical religious sentiment of his time. No man had a higher ideal of what his work should be, and he earns our undying respect as a fine artist and an honest man.

The Poetic Spirit of Watts

It has been said before that George Frederick Watts was a reformer, though in a different way from Hunt. The painting of Watts seems to suggest the poetry of Browning. Indeed, we may go farther; we may say that in spirit Watts was a poet and Browning an artist. In the pictures of Watts there is over the lofty purpose that outlasts mere accuracy of drawing, and even in his portraits we see the glimpse of the spiritual. Where Hunt was essentially Teutonic in his outlook, Watts goes back to the classics for his inspiration, although there is not the slightest trace of the pagan joy of life in his work.

George Frederick Watts was born in London on the 23rd February, 1817. His father, George Watts, was a musical instrument maker. George, junior, being rather delicate—throughout his life he was subject to severe headaches—which utterly prostrated him—was unable to have any regular schooling.

Making Portraits at Sixteen

At quite an early age G. F. Watts showed artistic promise. A friend of his father's had two sons, both artists, from whom Watts learned a considerable amount, while living in the same house was a French sculptor. The first result of this was seen in 1833, when, at the age of sixteen, we find him making portraits in chalk and selling them for five shillings each. Two years later he entered the Royal Academy schools, and, in 1837, he exhibited at the Royal Academy two portraits and a finely conceived study of a wounded heron.

About this time Watts made the acquaintance of a family with whom he was destined to have a lifelong connexion. He was commissioned by a Mr. Constantine Ionides, a Greek, to copy an old portrait of his father. So successful was Watts that another commission followed, this time a portrait of Mrs. Ionides. During his long life, Watts painted altogether five generations of the family.

The young artist was anxious to study in Italy, but there was the usual obstacle in the

CANVAS CRAFTSMEN *of the* VICTORIAN AGE



"The Happy Warrior," by G. F. Watts. To the brave knight, who has given his life in fighting for his country appears his guardian spirit to lay upon his brow the crown of immortality. (Photo. Holliger)

For biographies not included in the Groups see detailed Index

STILL ECHOING IN THE REALMS OF SPACE



In his somewhat obscure and mystical way, Watts here shows "Hope" as a blindfolded female figure seated on the globe in space and bending over her lyre, of which she plucks the sole remaining string. (Photo: Holtyer)

For biographies not included in the Groups see detailed Index

THE UNSHRINKING GAZE OF CHILDHOOD



With hands filled with blooms, the little cherub in Watts's picture, "Promises," looks out from his bower of rocks, his innocent gaze betokening bright hopes for the future. (Reproduced by permission of the Walker Art Gallery, Liverpool.)

For biographies not included in the Groups see detailed index

FLIGHT OF THE HOLY FAMILY INTO EGYPT



'The Scapegoat,' by W. Holman Hunt, depicting the outcast animal on the shores of the Dead Sea. This is one of the many pictures in which the artist has made the facts of Scripture history live again.



This significant "Triumph of the Innocents," Holman Hunt's imaginative version of the flight into Egypt, showing the Holy Family attended by the Holy Innocents. (Reproduced by permission of the Walker Art Gallery, Liverpool.)

For biographies not included in the Groups see detailed Index

way—lack of means. This was overcome in 1843, when he gained one of the prizes—value £300—offered by the Royal Commission for frescoes for the new Houses of Parliament, his design being "Caractacus led in Triumph through Rome." With this money he set out in the following year for Florence, travelling by way of Leghorn and Pisa. At Florence an introduction to Lord Holland, the British ambassador, proved of the utmost service. An invitation to spend a few days at Lord Holland's residence was extended indefinitely, and, in all, Watts remained nearly four years. A studio was specially fitted up for him and he was afforded every opportunity of stimulating and developing his artistic genius.

Although surrounded by luxury and society, Watts lived a most simple life, wholly absorbed in his work. In 1846 he was urged by Lord Holland to enter for a second competition organized by the Royal Commission, and once again he was successful, obtaining this time a prize of £500. Following this, he returned to London, and, after occupying for some time a room in Dorchester House, settled down in a studio in Charles Street, Berkeley Square. During this period he painted "Life's Illusions" and the "Scene from Boccaccio"—both in the Tate Gallery—and the first of his great series of portraits of famous men, "Lord John Russell," which he afterwards presented to the nation.

Genius for Making Friends

His genius for painting was second only to his genius for making friends. We have seen how kindly Lord Holland treated him. Shortly afterwards he was invited to stay with a Mr. and Mrs. Thoby Prinsep at their house in Holland Park. Watts accepted, and the house remained his home until it was pulled down twenty-four years later. Here he was cared for by his hostess, living his life as a recluse, working strenuously, and loved and respected by all. His few excursions into the outer world were for horse riding—the one form of exercise which he was able to take and of which he was passionately fond.

In 1860 Watts completed what is probably the most important modern mural painting in England, "Justice, a Hemicycle of Lawgivers," for Lincoln's Inn Hall. Here the Benchers entertained him to dinner—Hogarth is the only other artist on whom a similar distinction has been conferred—and presented him with a cheque for £500, not as payment but as a testimonial of friendly feeling and appreciation.

The year 1864 saw the artist's marriage to Ellen Terry, then a young girl full of beauty

and vitality, whereas Watts was nearly thirty years her senior, almost a recluse and a semi-invalid. It is little wonder that the marriage was not a happy one, and that the two separated by mutual consent little more than a year afterwards.

After the lease of the Prinseps' house had expired, Watts built himself a house and studio in Melbury Road, not far away, which he entered in 1876. Here he led the same retired life until some ten years later he was married again, at the age of sixty-nine, to Miss Mary Fraser-Tytler, who survived him. In 1891 he left London, having built a country house

A PAINTER WITH AN EARNEST PURPOSE



Self-portrait of G. F. Watts, in the National Gallery, London. In Watts' pictures there is ever the lofty purpose that outlasts mere accuracy, and even in his portraits we catch a glimpse of the spiritual.

in Surrey in which he spent the remaining years of his life. Advanced in age though he was, it was during this last period that he produced many of his most impressive works, among which may be included "*Sic Transit Gloria Mundi*," "Love Triumphant," and "For He had Great Possessions."

Always shy and retiring, hating the searching light of publicity, it was actually without his knowledge that, in 1867, Watts was elected an Associate of the Royal Academy, and made a full member a few months later. Twice he was offered a baronetcy, but refused the honour.

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He was, however, one of the first recipients of the Order of Merit on its institution in 1902. He passed away on the 1st July, 1904.

A man of essentially deep religious feeling, Watts never identified himself with any church, but his character is summed up in the motto which he chose to be engraved upon a small seal which had been given to him as a Christmas present in 1888. It was "The Utmost for the Highest."

It has already been said that some of the artist's finest works were done in his old age. There is the great "Eve" trilogy, in the Tate Gallery, which was first exhibited in 1896.

Three Great Masterpieces

The first shows the creation of Eve, who is surrounded by flowers and bathed in a golden light. The second, "Eve Tempted," shows her among the blossoms of the Tree of Knowledge, listening to the whisper of the serpent, and a panther lying at her feet. The third, and perhaps the most powerful, is "Eve Repentant." Wrapped in her flowing hair, every line of her expresses her agony of remorse and shame.

The great "Love" trilogy is more impressive still. In "Love and Life," the male figure of Love is assisting the slender girlish figure of Life up a steep and rocky path, his wings

protecting her shrinking form. "Love and Death" shows the tiny figure of Love vainly trying to bar the way to the mighty, silvery-draped figure of Death. In the last picture, "Love Triumphant," Love rises in a psalm of joy, the figures of Time and Death lying vanquished beneath his tiptoeing feet.

The Last String of Hope

One of the most popular of the allegorical pictures by Watts is "Hope." A single figure is represented as seated, blindfolded, on the globe. In her hand is a lyre of which all the strings are broken but one, and from this last she is drawing comfort.

It must not be forgotten, that, besides being a painter, Watts was also a sculptor, although he left most of his marbles in the rough. His most important works in this branch of art are two equestrian figures, of which the first "Hugo Lupus, Earl of Chester" stands in the grounds of Eaton Hall, near Liverpool; of the second, the memorial erected to Cecil Rhodes in the Matoppo Hills, there is a replica in Kensington Gardens.

[See "Five Great Painters of the Victorian Era," by Sir W. Bayliss (1902); "Pre-Raphaelism and the Pre-Raphaelite Brotherhood," by W. Holman Hunt (two vols., 1905); and "G. F. Watts," by Mrs. R. Barrington (1905), and G. K. Chesterton (1904).]

RUSKIN AND HOLMAN HUNT ENJOY A CONVERSATION ON ART



Holman's intervention on behalf of the Pre-Raphaelites was the turning-point in their fortunes. To a new edition of "Modern Painters," issued in 1851, he added a note in praise of Pre-Raphaelism, and, in a pamphlet published later in the same year, he vigorously defended both Holman Hunt and Millais. (Photo: Frederick Hollyer.)

For biographies not included in the Groups see detailed Index

A WOMAN RULER *Who* REFORMED RUSSIA

Catherine the Great, Who Became the Empress of All the Russias, Made Her Empire's Interests Her Own, and Pursued a Masterly Foreign Policy

IN an unimposing private house in the Domstrasse, Stettin, a daughter was born on the 2nd May, 1729, to the Princess of Anhalt-Zerbst.

Prince Christian Augustus of Anhalt-Zerbst came from a proud but insignificant German family, and at the time of his marriage with the young Princess Johanna Elizabeth of Holstein-Gottorp he was commanding the 8th (Zerbst) Regiment of Infantry at Stettin.

Their daughter, who was christened Sophia Augusta Frederika, was something in the nature of a disappointment, for a son had been hoped for, yet Figgey, as the baby princess was generally called, was to bring as much honour to her family as any son could have done, for this "plain, insignificant child" was no other than the future ruler of Russia—Empress Catherine II.

It was while Figgey was still quite a small child that a Roman Catholic priest, who was a student of palmistry, told the Princess of Anhalt-Zerbst that her daughter was destined for a brilliant career, adding that he could see three crowns on the child's forehead.

Figgey's mother refused to pay any attention to this prophecy, but that it was justified by events was proved when in January, 1744, there came from St. Petersburg an invitation for the princess and her daughter to visit the Russian capital and pay their respects to the reigning empress, who was Elizabeth, daughter of Peter the Great.

Figgey's mother was already known to Elizabeth, for the empress had been engaged to Princess Johanna's brother, Prince Charles Augustus of Holstein-Gottorp, who, unhappily, had died shortly before the date arranged for the marriage. Johanna was overjoyed at the

invitation, for already she divined the possibilities of an alliance between her daughter and the Grand Duke Peter, grandson of Peter the Great and nephew of the Empress Elizabeth, by whom he had been proclaimed heir to the throne of Russia.

After a long and uncomfortable journey the Princess of Anhalt-Zerbst and her daughter

arrived in Moscow on the 9th February, 1744, where they were received in great state by the Grand Duke Peter and his suite.

The Empress Elizabeth, who received the guests in her own apartments, was seemingly so enchanted with the young Princess Sophia that she immediately conferred upon both mother and daughter the Order of St. Catherine, and continued to display to them signs of her royal approval.

The Grand Duke Peter was delighted with his cousin, and soon the proposed alliance was discussed in Court circles in terms of a *fait accompli*.

Figgey, for her part, took her new position with great seriousness, and immediately devoted herself to studying the Russian language and mastering the intricacies

of the Greek Orthodox religion. So ardently, indeed, did the young princess apply herself to these occupations that she caught a severe chill as the result of pacing the floor of her room barefooted in the intense cold of a winter night, and was confined to her bed for some weeks.

It was in the following May, when Princess Sophia was convalescent, that the empress formally asked the Prince of Anhalt-Zerbst to consent to his daughter's marriage with the Grand Duke Peter. The prince's consent was duly given, though it must have been a bitter blow to the ardent Protestant that his child

CATHERINE THE GREAT



The German princess, who, although she had no hereditary claim to the throne, became the Empress Catherine II of Russia, and ruled that great empire for over thirty years.

should have to change her religion and become a member of the Greek Orthodox Church.

The public celebration of the betrothal of Princess Sophia and the Grand Duke Peter was held on the 29th June, 1744. On the preceding day the princess had been formally received into the Orthodox faith, and it was on that occasion that the empress bestowed on the young girl the name of Catherine, by which she was thenceforward known.

Catherine's Future Husband

The prospective bridegroom was not particularly attractive. Sickly and delicate from birth, he had lost his mother while yet an infant in arms, and his upbringing had been left almost entirely to strangers, with the result

WHERE THE EMPRESS WAS BROUGHT UP



The old castle at Stettin, where Catherine the Great was educated under her mother's eye. When Catherine's father was appointed military commandant at Stettin, he took up his abode here.

that the boy grew up ignorant, ill-tempered, and cruel.

During the months that elapsed between his betrothal and marriage the Grand Duke had the misfortune to contract smallpox, and so badly disfigured was he by this dread disease that for some considerable time after his recovery it was deemed inadvisable for him to meet his affianced bride. Eventually, after several delays, the marriage ceremony was fixed for the 21st August, 1745, and was solemnized on that day in the beautiful Kazan Cathedral in St. Petersburg.

The wedding festivities, which extended over a period of ten days, were planned on a magnificent scale. The marriage was most impressive. The procession started from the Winter Palace at 10 o'clock in the morning, and though the distance to the Kazan Cathedral

is little more than half a mile it was one o'clock before the bride arrived. Catherine was radiant, and, attired in a dress of silver *glacé* richly embroidered with gold, she made a striking figure as she entered the wonderful old cathedral, wearing the diadem of diamonds which had been placed on her head by the empress.

At the end of the ten days dedicated to celebrating the royal marriage, the Princess of Anhalt-Zerbst bade farewell to her daughter and returned to Germany. The life of the grand duchess in the first years of her marriage was neither happy nor easy.

The grand duke was never particularly attentive to his wife, and Catherine early found herself the object of sneers and innuendoes from those among the Russian aristocracy who were jealous of her exalted position and her superior mentality. Living as she did in an atmosphere of petty spite and intrigue, it was inevitable that stories unfavourable to her character should be told of the royal duchess to the empress, with whom for a time Catherine was extremely unpopular.

Birth of a Son

The birth of her son, Paul, in 1754, however, did much to restore her to favour, and thenceforward the grand duchess enjoyed not only a certain measure of immunity from scandal, but, also, greater personal freedom than had previously been accorded to her.

The death of the Empress Elizabeth occurred on the 25th December, 1761, and on the following day Peter was proclaimed emperor. Once again Catherine's position became exceedingly difficult. Latterly the Grand Duke Peter had not only been increasingly neglectful of his wife, but had, on more than one occasion, shown her marked discourtesy in public. It was generally appreciated that the uncouth man was ill at ease in the society of the more brilliant Catherine, and that he was jealous of her superior intelligence.

It was extremely significant that Peter's first official act, after the death of the Empress Elizabeth, was to exclude Catherine and her son from the manifesto which proclaimed him emperor.

Peter III was destined to have but a short reign, and it was during the few months he occupied the throne that Catherine first gave signs of those qualities of statesmanship and diplomacy which she undoubtedly possessed in no small degree. From the first Peter was unpopular with his subjects, and Catherine wisely held herself aloof—alike from his tyrannical despotism at home and his warlike policy

A SUPPLIANT AT THE OPEN-AIR COURT OF POUGATCHEFF



A Cossack ensign and son of a small Cossack landowner, Pougatcheff announced in 1773 that he was Catherine's husband Peter III, and rallied round him many adherents. The rising was quelled in the following year, and Pougatcheff was betrayed by his followers into Catherine's

abroad. Indeed, she did not interfere at all in affairs of State, but lived a retired life in her own apartments.

In spite of the comparative privacy of her existence, the young empress made a deep and favourable impression on the country of her adoption, and it soon became clear that there was in Russia a definite party who would like to see Peter III deposed and his consort either reigning in his stead or acting as regent for her son.

For a time Catherine does not appear to have been a party to any such scheme, but, finally, an incident occurred which definitely estranged her from her husband and incited her to plot against him.

Insulted by the Emperor

On the 4th June, 1762, a State banquet was given by the emperor and empress in celebration of the ratification of peace between Russia and Prussia. In the course of dinner, Peter proposed the health of the Imperial family, and Catherine naturally drank the toast sitting. The emperor, who was the worse for drink, demanded why she did not rise, like the rest of the company, and when Catherine explained that she did not consider it right to drink her own health standing, her husband shouted across the table that she was a fool.

The insult was heard by the whole company,

and matters were made worse when, on one of the party attempting to distract the empress by relating some amusing stories, the infuriated emperor ordered his guest to be conducted to his country residence and the empress to be placed under arrest. Happily, the latter measure was avoided, but the scene meant the end of harmonious relations between the royal couple, and Catherine thenceforward entered with zest into the plans for her husband's deposition.

Confidants of the Empress

Among the men on whom Catherine felt she could especially rely was a certain Stanislaus Poniatowski, a Polish noble who had been a brilliant figure in St. Petersburg society, but who, at that time, was not actually living in Russia, having been banished by the Empress Elizabeth. The young empress intended, after Peter III was deposed, to recall Poniatowski to St. Petersburg and to restore him to favour. Meanwhile, in her immediate entourage, she placed most confidence in the brothers Orloff.

In July, 1762, a bloodless revolution placed Catherine on the throne. The guards mutinied and took the oath of allegiance to her. Riding at the head of the troops, Catherine, arrayed in the uniform of the guards, went to Oranienbaum, where the emperor was carousing with his Holsteiners. Peter was powerless, and he consented to abdicate.

Thus Catherine became undisputed ruler of all the Russias, without having involved the country in civil warfare—without, indeed, the firing of a single shot.

The deposed emperor did not suffer the humiliation of being his wife's prisoner for long. A few days after the *coup d'état*, news was brought to Catherine of his death. The circumstances seemed suspicious, but though it was generally assumed that the unfortunate Peter met his death at the hands of Alexis Orloff, the Court physician testified that his heart

THE REBEL LEADER A PRISONER



When Pougatcheff was captured, he was put in irons, placed in a cage mounted on a cart, and taken to Moscow. Though sentenced to a terrible death, he was actually beheaded

was affected, and that he had expired from natural causes.

When Catherine had the reins of government entirely in her own hands, she made immediate arrangements for her coronation. Peter III had been formally proclaimed emperor, but he had never actually been crowned, and Catherine was far too astute a woman not to realize the vital importance of impressing the fact of her supremacy on her subjects in as spectacular a manner as possible.

The ceremony was fixed to take place at Moscow on the 22nd September. The festivities, similar in character to those which had celebrated her wedding, lasted for more than a week.

Of the coronation ceremony contemporary writers record that the empress bore herself

with great dignity, and made a most imposing figure as she entered the cathedral. She wore the Imperial mantle, and, according to the autocratic Russian custom, herself laid the royal purple on her shoulders, and with her own hands placed the crown upon her head.

Catherine at once set to work to study how she might best improve the conditions of the country and the people over whom she was to rule. She attended the Senate in person, and, in one of her first speeches, declared to the assembly that whereas the previous rulers of Russia had carefully reserved their private incomes for themselves, irrespective of the needs of the people, she, Catherine, considered that herself and all she possessed belonged to the State, and she desired her ministers to make no distinction, in future, between her interests and those of the empire at large.

Gains Confidence of the People

This was an extraordinarily large-hearted action, and it was also an extremely clever political move, for thenceforward the empress had the confidence of both the Senate and the public to an extent which it might otherwise have taken her years to attain.

Catherine was seriously concerned with the question of Russia's scanty population, and one of her efforts at reform was the remedying of this national defect by inviting immigrants from abroad to settle in Russia, mainly with the idea of founding agricultural and commercial colonies, and so achieve the double result of increasing the population and developing the country. Unhappily, the scheme was not entirely successful, for the foreigners who settled in these colonies in Russia never became part of the country of their adoption, and remained untouched by the stream of national progress.

Among the successful reforms inaugurated by Catherine the Great may be mentioned the reorganization of the army, which had been entirely mismanaged by her predecessors. The young empress created order out of chaos, and managed to introduce sufficient discipline to bring the military service up to the standard attained by other European armies.

Question of Ecclesiastical Lands

Her Imperial Majesty was also responsible for the preliminary investigation into the condition of the ecclesiastical lands. Peter III had already, in 1762, issued a decree which entitled the peasants to cultivate the ecclesiastical lands for their own benefit. When Catherine was invited by the clergy to repeal this decree, she took up an original attitude. While refusing to grant the peasants the privileges accorded to them under Peter III's decree, she would not admit that the clergy were them-

DESTRUCTION OF THE TURKISH FLEET BY THE RUSSIANS



In 1770 Alexis Orloff was appointed commander-in-chief of the fleet which Catherine sent against the Turks. In July of that year, the Turkish admiral having foolishly allowed his ships to be blockaded in the narrow channel of Chios, Orloff, by the use of fireships, annihilated the far superior Turkish fleet off Cheshme.

selves fit to administer the estates, and she appointed a commission to deal with the whole question of land ownership. Thus nearly 250 years ago began the struggle which has now terminated so disastrously for land ownership in Russia.

In spite of her success as an administrator and her popularity as a ruler, Catherine the Great was at times uneasy as to the security of her throne. There were two reasons for this. Firstly, Ivan III, as the legitimate ruler of Russia, who had been deposed as a child, was alive, though in custody at Schlüsselburg, near St. Petersburg; and, secondly, a Cossack named Pougatcheff had raised a rebellion in the provinces, with Orenburg as a centre, and was calling upon the credulous populace to rally to the cause of the Emperor Peter, for he declared himself to be none other than the Empress's husband, Peter III.

A Prisoner for Eighteen Years

Catherine visited Ivan in his prison at Schlüsselburg, and apparently formed the opinion that he was practically insane—which, if true, was not surprising, as the unfortunate young man had been kept a close prisoner for eighteen years, during which time no one

had access to him, other than his gaolers. The empress, however, evidently regarded him as a rival, for she gave explicit instructions to the governor of the prison that, in the event of any attempt to rescue Ivan, he was to be assassinated. The royal orders were carried out shortly after.

Pougatcheff's Rebellion Quelled

With the rebellion headed by Pougatcheff, Catherine dealt in a similarly summary manner. She dispatched an army to quell the rebels, and ordered their leader to be brought to Moscow in chains. Pougatcheff was beheaded, his body being quartered and exhibited to the people as a warning.

Catherine now felt herself to be perfectly secure at home, and, being not only an ambitious but an imperially minded woman, she turned her attention to the promotion of good relations between Russia and other European powers. It had been largely through the support of the empress that Poniatovski had been elected King of Poland in 1762, soon after the death of Augustus III, and though this nomination tended ultimately to weaken Poland rather than strengthen Russia, Catherine could not have foreseen such an event.

Towards England, the empress's attitude seems on the whole to have been not unfriendly, though during the War of American Independence she more than once spoke in terms of contempt of a "country which could not keep her colonies."

Generosity to an English Doctor

The expression of such sentiments led to a certain official coolness between the two countries, though in her personal relations with individual Englishmen the empress was always particularly gracious. For instance, when, during the smallpox epidemic in 1768, she invited the English doctor, Thomas Dimsdale, to visit Russia for the purpose of inoculating her son, the Grand Duke Paul, and herself against the dread disease, Catherine received her visitor as an equal, entertained him

HOW THE RUSSIAN EMPRESS TRAVELLED IN STATE



The roomy and luxurious covered sleigh, drawn by six horses, with its attendant postillions, footmen, and outriders, used by Catherine the Great on her imperial journeys. (After an engraving by Hoppe)

lavishly, and, on his departure, loaded him with presents.

In the year 1780 Russia's relations with Prussia became definitely strained, and the very friendly understanding which at that time existed between Frederick William II of Prussia and George III of England was doubtless in some measure responsible for the suspicious attitude which Catherine, throughout the closing years of her life, came to adopt towards the latter country.

Certainly, England viewed with hostile apprehension Catherine's attempts to expand her sphere of influence by entering into war with Turkey, and she had some justification for feeling that England was instrumental in preventing the fulfilment of her dream of flying the Russian flag in Constantinople.

In the same way Frederick William of

Prussia was interested in curtailing Russia's influence in Poland, and in preventing her campaign against Sweden from being brought to a successful conclusion.

Finding herself at war with both Turkey and Sweden, and feeling that the balance of European opinion was against her, Catherine concluded, in 1790, a peace with Gustavus III of Sweden, on terms which practically amounted to a reversion to the *status quo ante bellum*.

In order to cement good feeling with Sweden, Catherine arranged an alliance between the crown prince of that country and the Grand Duchess Alexandra, the daughter of her son Paul. During the negotiations for this matrimonial alliance, Gustavus was murdered. His brother, who was appointed as regent, was not very favourably disposed towards a Russian bride for the new king. However, in August, 1796, Gustavus IV and his uncle arrived in the Russian capital, and, the young monarch and the Grand Duchess Alexandra being immediately attracted to each other, the betrothal was arranged.

Celebration Arrangements

The necessary arrangements for the celebration of the betrothal were complete, the actual day and hour having been fixed, and then one of Catherine's ministers, just before the ceremony was due to take place, handed the marriage contract to the King of Sweden for his signature.

The contract contained a clause binding the young monarch to undertake certain enterprises against the French, and on learning this his Majesty categorically refused either to sign the contract or to attend the betrothal celebrations.

A few days later, on the 5th November, 1796, the empress arose in the morning as usual, transacted her customary business, and then dismissed her secretary, telling him to remain in the antechamber until she should summon him.

After waiting a considerable time the secretary became alarmed, and sent servants to look for their royal mistress. Catherine was found, stretched on the floor of her room, insensible though still alive.

All attempts at restoration failed, and after remaining unconscious for some thirty-six hours Catherine the Great passed away leaving her son, Paul, to reign in her stead.

[See Lives by W. Tooke (1799) and E. A. Brayley Hodgkiss (1914).]

A WANDERING MUSICIAN of GERMANY

Johannes Brahms, the Irresistible Composer, Who, Moving from Place to Place, Gained the Plaudits of the World with His Brilliant Gift of Music

THE house in which Johannes Brahms was born on the 7th May, 1833—No. 60 Spekstrasse, Hamburg—still stands. It is situated in a small, gloomy little court, formerly called Schluter's-court, and is a tall gabled, ramshackle rabbit-warren of a house, built to lodge not one, but several families. The whole neighbourhood surrounding it bears witness to the poverty in which one of the world's greatest musicians passed his earliest years.

Jakob Brahms, Johannes' father, was a shiftless, unreliable creature, who had run away from his home in Holstein, determined to try his luck as an itinerant musician. After some years of wandering he had settled down in the sailors' quarter of Hamburg, in whose rowdy dancing-saloons and drinking booths his musical talents found full occupation. Jakob could play almost any instrument passably well. Violin, viola, 'cello, flute, horn, and double bass—he was at home with all of them. He worked away with a perseverance, which seems rather pathetic when his completely impractical and temperamental character is remembered. However, during his twenty-fourth year he did the best day's work of his life by marrying Johanna Menrika

Christiana Nissen, a woman of forty-one years. She was small and plain, and did not enjoy good health, but her affectionate disposition and her natural shrewdness made her the best possible wife in the world for Jakob Brahms.

Almost from infancy Johannes, like most other great musicians, showed indications of surprising musical gifts. Having once heard in air he never forgot it, and at the age of five he was already taking music lessons from his father, and making remarkably rapid strides. He was a child of exceptionally affectionate nature, never straying far from the mother he adored. Above all else he delighted to "help" her in her household duties. His best-loved toys were a few lead soldiers, which, battered by many battles, he kept locked up in his bureau all his lifetime.

When he was about eight years old Johannes was sent to a small day school in the neighbourhood of his home. Of this establishment nothing is known, but it was probably very like an English dame-school of the period, no better and no worse. At the same time, the little boy began his first proper music lessons. Jakob Brahms had a professional acquaintance named Cossel, a man who had studied under the best pianoforte teachers of Germany, but

whom bad health and misfortune had brought to playing in Hamburg orchestras. At Jakob's request Cossel now became Johannes' master, and during the very first lesson he realized that he had no ordinary pupil to teach.

The boy soon won his teacher's affection, and Cossel, disappointed in his own ambitions, secretly resolved that he would do all in his power to ensure a brilliant career for little Brahms. Jakob Brahms desired nothing more than that his son should become a respectable performer in an orchestra, and was anxious to see him established in this profession as soon as possible. But Cossel fought with all his strength to convince Jakob that his son ought to have a thorough musical education, cost what it might. Cossel

wished his pupil to be placed under his own former master, Marxsen, but the problem of ways and means seemed to render such a scheme impossible. Eventually, a private subscription concert was arranged, in order to raise the necessary funds. At this concert, however, Johannes himself played so well that an impresario in the audience at once offered to take him on a tour as an infant prodigy.

On hearing of this suggestion Cossel fell into a tremendous fury, for he saw all his plans ruined, especially as such a tour as the impresario proposed appealed to Jakob Brahms for its financial possibilities. For days, however, Cossel argued, stormed, cajoled, and intrigued, and ultimately he had his own way. Marxsen undertook Johannes' education without remuneration, and soon became as attached to the boy as Cossel had been. It is not too

AS A YOUNG MAN



Like most other great musicians Johannes Brahms, almost from infancy, showed indications of surprising musical gifts.

much to say that but for Cossel's firm stand, Brahms, in all probability, would never have developed his genius as he did, and on this account the name of the invalid pianist of Hamburg will ever be remembered with honour and gratitude.

So at twelve years Brahms started his real musical education under the best teacher in all northern Germany. Marxsen was a kind, though strict master, who kept his pupil busy, allowing him to shirk no difficulties or hard work. His aim was thoroughness, and from him Brahms received such a drilling in the groundwork of music (both practical and theoretical) that he grew up one of the best-equipped musical composers that the continent of Europe has ever known.

Removed from the Slums

During 1847, however, this hard work, combined with the late hours necessitated by his playing in dancing-rooms each night, caused a breakdown in Johannes' health. A rich friend of the Brahms family, a paper manufacturer named Gieseemann, heard of his illness, and took the boy from the Hamburg slum in which he lived, to his own country house at Winsen. All through the summer he remained in the country—coming to Hamburg each week for his lesson from Marxsen—and greatly profited from the country air and freedom. His musical gifts attracted attention, and though he was but fourteen, he was soon conducting the choral society at Winsen, for which he wrote his first composition, a simple but spirited part song.

During his visit Johannes won the Gieseemanns' hearts, and they determined to aid him in his career. Accordingly, soon after his return to Hamburg, Herr Gieseemann arranged that Johannes should play at a forthcoming concert. His gifted performance was most encouragingly approved, and his paper manufacturing friend saw to it that he received a notice in those newspapers which were printed on the products of his paper mills.

A Concert of His Own

This performance led to greater things, and in September, 1848, Johannes gave a concert of his own in Hamburg. He was so well received that during the following spring he gave another concert, at which he played a composition of his own—"A Fantasia for Piano on a Favourite Waltz."

Nevertheless, in spite of such a successful entry into the musical world, the next four or five years were the darkest and most miserable in Brahms' life. He had to earn a living; and was forced to do so by giving wretchedly paid lessons to unwilling and stupid pupils, or else by acting as pianoforte accompanist

behind the scenes at one of the Hamburg theatres. In spite of these disheartening circumstances, he continued to compose incessantly, guided in all he did by Marxsen, whose sympathy and kindness he could always rely upon. So the daily grind endured until the early summer of 1853, when Herr Gieseemann suddenly came forward with the suggestion that Brahms and a friend of his, the violinist Remenyi (a German-Hungarian Jew) should go on a concert tour together.

Transposes a Beethoven Sonata

Brahms naturally hailed the idea with delight, and the first concert was accordingly given at Winsen, under "Uncle" Gieseemann's patronage, during the last week of April, 1853. The performance turned out a distinct success on a modest scale, the performers profiting to the extent of about £10. Thus encouraged they moved on to Celle, where they gave a concert on the 2nd May. At the concert-hall there Brahms found an ancient piano, tuned quite a semitone below pitch. To the good people of Celle a piano was just a piano, and nothing better could be produced at short notice. Brahms, therefore, had to transpose his part of the Beethoven violin sonata (which formed an item of the programme), and played it in C sharp instead of C sharp minor.

So successful was he in this extremely difficult feat that no one knew of it, until Remenyi announced the fact at the close of the concert. From Celle the two musicians journeyed on to Lüneburg, where their concert took place on the 7th May, Brahms' twentieth birthday. This concert proved to be their first really popular success, and on the next day they were forced to give another concert "by general desire."

Acquaintance with Joachim

This tour marked a step forward in Brahms' career. It placed him definitely in the musical world, a world in which ere long he was to become a figure of some consequence. Almost immediately after the second concert at Lüneburg, Brahms became acquainted with Joachim, who was then living at Hanover, and who, although only a few years older than his new acquaintance, was already a world-famous violinist. Joachim and Brahms were instantly attracted to one another, and soon became firm friends. Moreover, it was arranged, through the violinist's influence, that Brahms and his companion Remenyi should give a concert before King George of Hanover and his Court. Brahms' playing on this occasion was hailed with tremendous applause, and led to an introduction to Liszt, the chief Court musician to the Duke of Saxe-Weimar.

Brahms now parted from Remenyi, who was a most intolerant, vain, and insupportable

colleague, and passed on to Göttingen, whither he had been invited by Joachim. The great violinist welcomed his friend enthusiastically, and insisted that he should remain with him for the time being. The pair were soon hard at work, composing, playing, and studying. Once again Brahms' delightful personality stood him in good stead, and Joachim was soon using all his immense influence in the musical world to secure his companion's future. As a result of Joachim's interest, Brahms met Schumann and his wife, who then reigned as king and queen over German music. Schumann quickly perceived the young man's genius. "Someone is come," said he, "of whom one day we shall hear all sorts of wonderful things; his name is Johannes Brahms."

Hailed by Schumann

As a result of making Brahms' acquaintance, Schumann published an article, on the 28th October, 1853, in the *Neue Zeitschrift für Musik*, which contained the following words:

I have thought . . . that someone must, and would, suddenly appear . . . who would bring us his masterpiece, not in process of development, but would spring forth like Minerva, fully armed, from the head of Jove. And he is come . . . He is called Johannes Brahms.

Such words coming from Schumann suddenly raised Brahms to the level of the most famous of contemporary musicians. Schumann was wholehearted in his likes and dislikes. He had immediately perceived the genius and felt the charm of Brahms; and, by a stroke of the pen, he "made" him. Thenceforward, though he might remain poor, though he accomplished nothing further, Brahms was to "count" in the world of music.

Brahms never married, and, though in his later years he more or less settled down, he spent most of his days wandering about Germany and Austria, with occasional visits to Italy and Switzerland. So charming a guest, so devoted a friend was he, that he was made welcome for as long as he cared to stay in

several homes, and he divided his time between these and various lodgings. It is typical that his landladies invariably became devoted to him, humouring all his little whims and eccentricities, and thinking nothing too much trouble for "Dr. Brahms," as he soon became.

From 1853 until Schumann's death in July,

A DINGY HOUSE ENNOBLED BY A BIRTH



No. 60 Speckstrasse, Hamburg, the place where Brahms was born, is situated in a small, gloomy court. It is a ramshackle rabbit-warren of a house, built to offer shelter to not one, but many families.

1856, Brahms lived mainly in the company of Joachim and of Schumann and his wife. During her husband's last months, Clara Schumann came to rely more and more upon the two young friends' help and sympathy. The great musician's brain gradually decayed, until, a little before he died, he was almost an imbecile. After his death, Brahms became an even closer friend of the widow, who survived

her husband for many years, and whose death practically killed Brahms himself. Clara Schumann, as she grew older, became a sort of legend in Europe's music. She was a brilliant pianist whose concerts wherever she went were crowded by an adoring public. She proved herself Brahms' best and most powerful friend. She introduced his works into all her concert programmes, spread his fame, and extolled his genius throughout Europe.

From the time of Schumann's death to the autumn of 1862, Brahms continued his wandering life in Germany. During this period he definitely established his claim to be considered among the front rank of living composers, mainly owing to the public performances of his first piano concerto, and of his piano variations on a theme of Handel's. The latter are among the grandest and most stirring of all piano compositions. Clara Schumann played them everywhere with enormous gusto and verve, so that those who hitherto had taken little interest in Brahms eagerly sought to know more of him and his compositions.

Establishes Himself in Vienna

During the autumn of 1862 Brahms arrived in Vienna and established himself in cheap lodgings in the Jägerzil—a quarter inhabited largely by university students. The good-natured, happy, easy-going Viennese attracted Brahms, and within a few days he felt himself completely at home with them. He had letters of introduction to most of the city's foremost musicians, among whom he made a close friend of Julius Epstein.

Epstein found Brahms as irresistible as Joachim and Schumann had done, and through his good offices a concert was quickly arranged at which Brahms played his own compositions. "We were all delighted and carried away," wrote Epstein to one of his friends in reference to this performance. Indeed, so successful was this first venture that a second concert was arranged for the 20th December. On this occasion the house was crowded, and his reception set the seal of complete and permanent success upon Brahms' visit to the hospitable Austrian capital.

Back in Austria Again

At last, during May, 1863, Brahms forced himself to leave Vienna and all his charming new friends. He returned, albeit reluctantly, to studious work at Hamburg. But ere he had been gone a month he was elected to the post of conductor to the Vienna Singakademie (the most important society in the city devoting itself to vocal music). This was the first honour he had ever received, and Brahms was delighted with it. Owing to this appointment, he returned to Vienna in August, 1863,

and threw himself into his new duties with characteristic enthusiasm and earnestness. As a conductor Brahms delighted the Viennese all through the winter season, and when the last concert had been given and the conductor's term of office had come to an end, many and loud were the regrets expressed by the large company of his devoted admirers.

Settles a Domestic Strife

Brahms once more resumed his wandering life, spending much of his time with Clara Schumann and her children at Baden-Baden, but never remaining in one place for more than a few months. During the summer months of 1864, moreover, he was anxiously engaged in effecting an amicable separation between his parents. Jakob Brahms' happy-go-lucky behaviour had at last become unendurable, and his son saw that the only solution to the domestic *impasse* lay in a separation. Accordingly, he went to Hamburg, established his mother and his sister Elise in comfortable quarters, and took upon himself the entire responsibility of their maintenance.

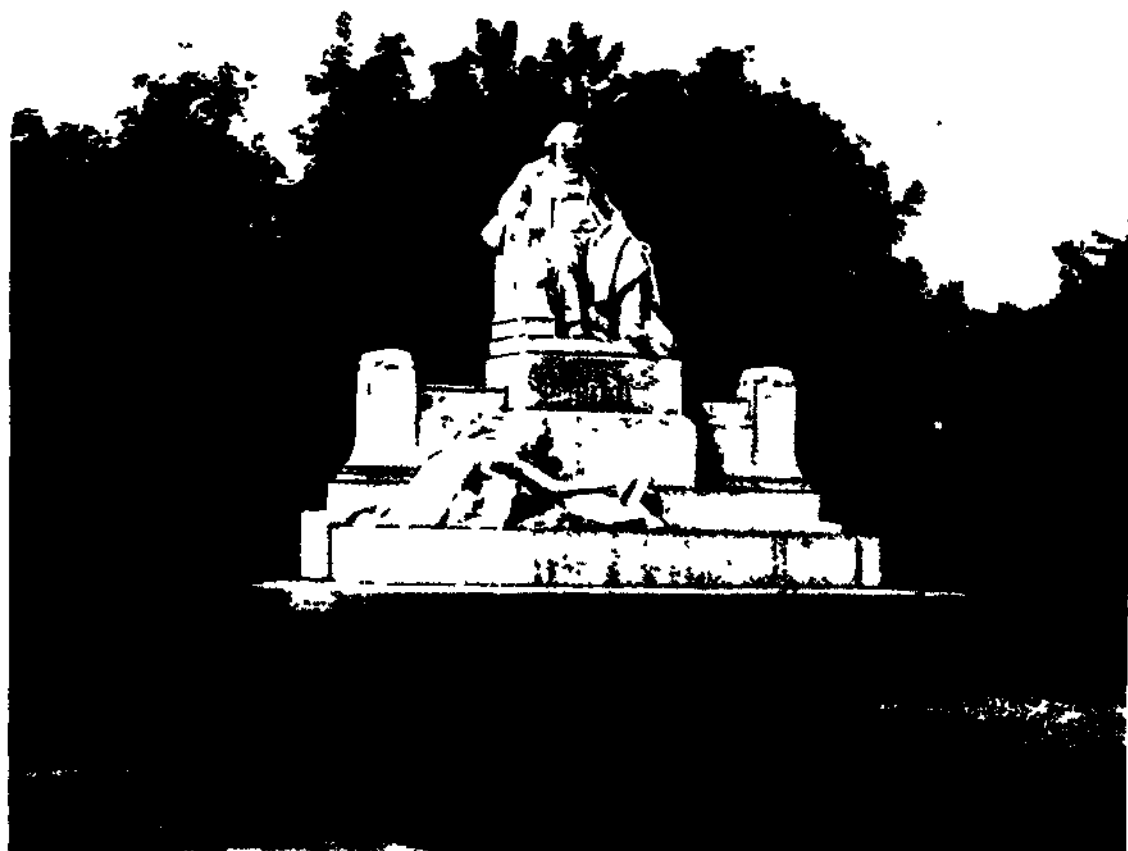
This arrangement, however, soon came to an end, for on the 2nd February, 1865, Frau Brahms died, before her son could reach her side. This shock, for the time being, utterly deranged all Brahms' plans and ideas. He could only think of the loss he had suffered. "I have no mother now," he said, "I must marry." His family difficulties, however, were soon settled by the not unattractive Jakob, who solaced himself by marrying the proprietress of a restaurant. This lady kept him completely under her thumb, allowed him only a few pence pocket-money at a time, and soon reduced him to a far greater state of orderliness and good behaviour than he had ever before attained.

Engaged on His Greatest Work

Gradually Brahms recovered from the shock of his mother's death. For several years he continued his usual life, growing in fame and reputation wherever he went, playing at concerts, taking a few favoured pupils, and composing incessantly. He was engaged during this period on what ranks, perhaps, as his greatest work, the *German Requiem* (or, as it is now more generally known, the *Brahms' Requiem*). This truly magnificent composition was first performed in its entirety in St. Peter's Cathedral Church at Bremen on Good Friday, 1868. The performance was in every way a success, and all the many musicians present felt that Brahms should be ranked among the greatest musicians of all time.

After the performance of his *Requiem*, Brahms found himself in a position to discontinue giving concerts. He had now a sufficiently

THE GREAT MUSICIAN'S MEMORIAL ERECTED IN VIENNA



Though there are many anecdotes concerning him, little information can be gathered of the real Brahms. His personality is enshrined in his scores—it lived during his lifetime in the playing of his favourite instrument, the piano. "You must ask him to play to you," Frau Schumann would say, "and then you will begin to know Brahms."

assured income to render him independent. He, therefore, chose to settle down more or less, and decided upon Vienna as his future home. By the beginning of 1869 he was comfortably established, and for the future he spent quite half of his time in the Austrian capital. But he could not altogether give up his wandering habits, and he was continually making journeys to all parts of Germany, to visit friends, to hear some new piece of music performed, or to conduct at a concert.

After various changes, Brahms eventually moved his possessions to No. 4 Carlgasse, Vienna, which remained, from 1872 until his death, the nearest approach to a settled establishment that he ever had. His apartments, which have become historic, consisted of three small rooms—one for a study, another in which to receive visitors, and his bedroom. Frau Vogel, his landlady, cared for him during the

twenty-five years of his tenancy with the utmost devotion and unobtrusive kindliness. Each day Brahms dined at one of four restaurants—the "Kronprinz," the "Goldspinnerin," the "Zu Schönen Latz," or the "Zum Rothern Igel." He dearly loved to be joined at dinner by his friends, or by any celebrity who might be in Vienna at the moment.

Many eminent men partook of homely dishes in the poky little back room at the "Zum Rothern Igel"—the restaurant Brahms mostly used during his latter years. No matter how distinguished his visitor might be, Brahms never varied his fare. If folks wished to make his acquaintance, they had to take him as they found him. Such was his invariable attitude.

Few outstanding events other than purely musical ones filled the years that Brahms lived at Vienna. He visited his friends as of old, and occasionally undertook a short tour,

as, for example, his visit to Holland in 1876, where the reception accorded to him brought him unmixed and childlike gratification. It was in 1876, that Brahms heard his first symphony performed, and this event marks in a way the climax of his musical development.

Thenceforward, though the current of his thought might grow deeper and the scope of his imagination more profound, the range of his powers did not broaden. He had established himself among the first rank of com-

A GERMAN COMPOSER WHO STIRRED THE WORLD



Brahms loved children, and was never more at his ease than when in a nursery. He was one of those people to whom children and animals immediately attach themselves

posers in every branch of his art. His songs were sung all over Europe, his choral works were ranked with Bach's, his piano music with Beethoven's, and then his first symphony showed that in this, the widest sphere of music, he was equally a master.

Innumerable stories are told about Brahms. He was a most simple and transparently sincere man, who hated pretensions and shams above all else. Nevertheless, he was not without an acute wit and a sharp humour. He detested dressing-up for any occasion whatsoever, and was only happy when allowed to wear his

old, every-day clothes. This foible was largely responsible for his steadfast determination never to pay a visit to England. He was convinced that in this country he would be made to wear dress-clothes; nor would he be allowed to smoke when and where he liked. Therefore, he would not come to England, although several times he was asked most earnestly and sincerely to do so.

Brahms had a most devoted love for the countryside, and during the hot summer months, when he usually retired from Vienna to Thün or Ischl, he was never happy unless out of doors. Generally he would rise at four or five o'clock, before anyone else in the house was awake, and steal out for a long walk in the woods. He was also devoted to children and fond of all animals.

Death of Clara Schumann

During May, 1896, Brahms left Vienna to spend the summer at Ischl. He had scarcely settled down there, when he heard of Clara Schumann's death at Frankfurt on the 20th May. He immediately journeyed to Frankfurt, and attended her funeral at Bonn on Whit-Sunday, the 24th May. He was profoundly affected by this event, and could return to Vienna only after several days' rest at a friend's house. Finally, he returned again to Ischl, but he never recovered from the blow which the death of his oldest and most faithful friend had dealt him.

During the autumn of 1896, on medical advice and much against his will, he underwent a "cure" at Carlsbad, which, however, did him little or no good. By the end of October he was back in his own Vienna rooms, very ill indeed, but hating to acknowledge the fact. If anyone dared to ask him how he was, he invariably answered "Each day a little worse,"

in a tone of mingled fury and cynical enjoyment. Throughout the winter months he gradually lost strength and hope, and died very quietly and peacefully on the morning of the 3rd April, 1897.

He was buried beside Beethoven and Schubert, after a magnificent public funeral which contrasted oddly with the extreme simplicity and plainness of his own life in its every aspect. Brahms now rests among his peers in the stately Friedhof at Vienna.

[See Lives, by J. A. Fuller-Maitland (1911), F. May (1905), and M. Kalbeck (1908-14).]



A BANKER'S JOURNEYS *into* INSECT LAND

Lord Avebury, the Business Man, Politician, and Author, Who Probed the Mysteries of Nature and Made Many Interesting Discoveries About Bees, Ants, and Wasps

HAD he done nothing else than establish bank holidays by Act of Parliament, as he did in 1871, Lord Avebury would have deserved remembrance by his country. But this was only one of the achievements of this most-gifted, industrious, and versatile member of the "great Victorians," who was on intimate terms with all the greatest men of his period, and who was the associate of such giants in intellect as Darwin, Huxley, and Gladstone.

There are doubtless many people who revere the name of Lord Avebury (better known as Sir John Lubbock) owing to the fact that they received their introduction to the treasure-house of literature through his famous list of "The Hundred Best Books," to say nothing of the mental stimulus received by their reading of such delightful books from his own pen as "The Pleasures of Life." Yet, besides achieving fame as a politician, an author, and a man of business, Lord Avebury distinguished himself as a scientist.

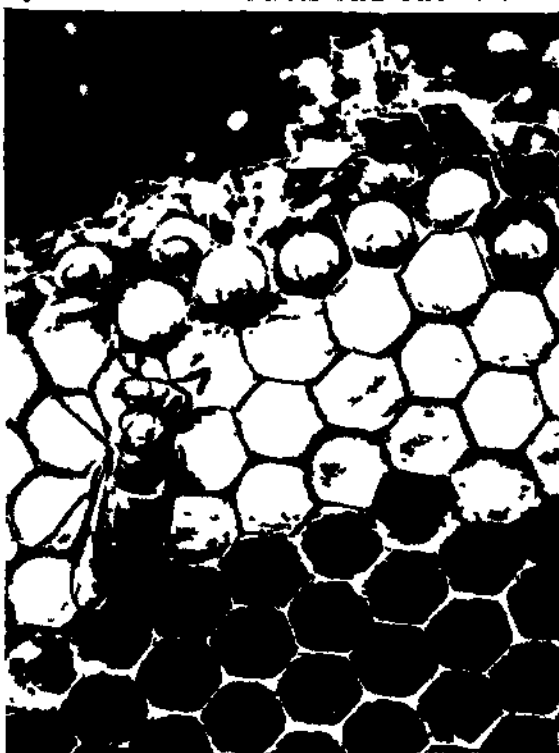
The Lubbocks were an ancient Norfolk family, but John Lubbock, the future Lord Avebury, was born at Eaton Place, in London. His father, Sir John William Lubbock, third baronet, was a banker of Lombard Street. John was born on the 30th April, 1834, the first of a large family.

His love for natural history and scientific pursuits he inherited from his father, who found relaxation from business in these studies, and who won distinction as a gold medallist of the Royal Society. Amongst the boy's earliest memories was that of assisting his father to take the first photograph ever obtained by the daguerreotype process in this country. He was then about five years old, and the

experiment was made in his grandfather's garden at Mitcham Grove, in Surrey. The sweetness and gentleness of his disposition, which characterized the whole of his life, was as certainly a heritage from his mother.

From his earliest boyhood, John Lubbock was interested in such objects of natural history as come within a schoolboy's reach, and

JUST EMERGED FROM THE CHRYSALIS



Studying the habits of wasps was a source of much intellectual enjoyment to Lord Avebury. On one occasion he introduced to the British Association a wasp that he had tamed.

made many collections of his out-of-door studies. Natural history books formed his favourite reading, and his parents noted that he had a remarkable memory for everything he read.

At the age of eleven, after a few years at a private school at Abingdon, the boy went to Eton. He groaned under the system of education which then prevailed, little being taught except Latin and Greek. Although he was over fourteen when he left Eton, he never did a sum in arithmetic during the whole of the time he was there. But his own inclinations were freely indulged. He read books on geology and natural history outside the class-room, to the great disappointment of his tutor, who

would have much preferred to see him writing Greek verse.

The boy's father evidently did not think that Latin and Greek, and no sums, was a system of education calculated to make a banker of his heir. He had two partners in his City business, and both of them were in failing health, so that the question of taking in another partner had seriously to be considered. This combination of circumstances resulted in John being removed from Eton to a desk in his father's counting-house.

The change had the happiest results. It allowed the boy's character and mind to



develop, and gave him a thorough training in business. His father acted as a tutor to him in his further studies, and the boy himself, eager for knowledge, read for about seven hours daily, especially books on natural history. His father's connexion with several scientific societies, and his various collections of natural objects, greatly stimulated the son's interest in science. The boy had a fine microscope, and soon began to draw natural-history objects, and even to write essays on his favourite studies. When he was about sixteen, he became a member of the Royal Institution and

SCIENTIST, POLITICIAN, AND AUTHOR



Though a man of business, a politician, and an author, Lord Avebury was, pre-eminently, a scientist. His chief ambition was to probe the secrets of nature.

lectured on natural history to a village audience on the subject of "Wireworms."

One of his father's neighbours and intimate friends was Charles Darwin. The younger John Lubbock shared the friendship. Indeed, before he was twenty-two, he was personally acquainted with all the great scientists of that day, including Huxley, Tyndall, Sir Charles Lyell, and Sir John Evans.

There was one characteristic of John Lubbock which explains how, during a long and very active life, he succeeded in doing so much work, and in maintaining an active interest in so many things. From the time he entered

his father's office, he carefully apportioned his leisure, regularly retiring at midnight and rising at 6.30.

The only outdoor recreation he enjoyed was cricket, and he played frequently for the local club and for a team representing the House of Commons.

Science, however, was his greatest interest. When he was only twenty, great scientists like Sir Charles Lyell, Sir J. Prestwich, and Charles Darwin were corresponding with this young banker-naturalist concerning discoveries of fossil bones of a musk ox, which he had made in a gravel pit near Taplow. In 1853, his first paper on natural history was placed before the public.

Friendship with Charles Darwin

Between John Lubbock and Charles Darwin there was a very close bond of friendship. The younger man regarded the great scientist almost as a father, and the frequent letters which passed between them, even when weighty scientific problems were being discussed, were full of affection and playfulness. Darwin, in these letters, more than once expressed his astonishment at the amount of work Lubbock got through, and the quantity of scientific reading he mastered. He borrowed scientific books from the young banker, revised the proof sheets of his books, and even went so far as to seek the judgment of the young scientist on some obscure facts in biology.

In 1859, Darwin published his "Origin of Species," and amidst the storm of criticism which immediately followed publication, Lubbock stood courageously by the side of the author, defending his views on every possible occasion. Much of the criticism that was showered upon the great scientist appears very ridiculous to-day, but at that time it required a good deal of courage to defend the conclusions contained in the book.

Science his Life Passion

That science was the passion of his life is illustrated by the way Sir John Lubbock spent his holidays. Even such a brief holiday as Easter enabled him to visit the gravel pits of the Somme Valley, and examine for himself the numerous flint implements used by prehistoric man at Abbeville.

It is highly significant that although he was only twenty-six when he visited Abbeville, John Lubbock coined the words—Palæolithic and Neolithic—which we now use to describe the periods represented by the earlier and later Stone Age. The dictionary preserves his memory :

Palæolithic : The term applied by Sir John Lubbock to the first of the four great epochs into which he divides prehistoric archaeology.

In 1865, Lubbock published his famous book "Prehistoric Times," which not only told all that was known about the early history of man upon the earth, but told it with delightful freshness and clearness, a characteristic of all Sir John Lubbock's writing. Here was no dry-as-dust scientist writing what only scientists as learned as himself could follow, but one who took his readers into the wonderland of science and explained its mysteries so that the dullest intellect could understand.

The later or polished Stone Age; a period characterized by beautiful weapons and instruments made of flint and other kinds of stone, in which, however, we find no trace of the knowledge of any metal excepting gold, which seems to have been sometimes used as ornaments. Thus we may call the Neolithic period. . . . Man shared the possession of Europe with the mammoth, the cave-bear, the woolly-haired rhinoceros, and other extinct animals. This we may call the Palaeolithic period.

These extracts from the early pages of "Prehistoric Times" illustrate the freshness of Sir John Lubbock's style, and the early use of the two archaeological terms already referred to. The book was exceptionally popular, and it enjoyed a very wide circulation, both in Great Britain and abroad.

Exploring Ancient Lake Dwellings

An earlier holiday he spent in Switzerland with Tyndall and Huxley, exploring the remains of the ancient lake dwellings on the Lake of Geneva. An incident here reveals the man. As he gazed down into the water in which the piles of the ancient dwelling were plainly visible, the Lombard Street banker thought he espied a stone axe. Immediately he stripped, and dived several times in order to try and recover this treasure, but it turned out to be a piece of wood. At another site, where the water had receded they were more successful, and, by digging found several stone axes and pieces of pottery.

Other holidays were spent in exploring the

ancient shell mounds in the north of Scotland and in Denmark. Another year, hearing that Vesuvius was in active eruption, Sir John Lubbock went off with Professor Tyndall and other friends to examine the volcano at close quarters, with successful results.

His scientific researches were, however, too

HOW IT LOOKS UNDER THE MAGNIFYING GLASS



This strange-looking object is nothing more than the face of a wasp, very highly magnified. Although wasps can suck honey from flowers, their mouths are far less perfectly adapted for this purpose than are the mouths of bees. For this reason wasps can draw nectar only from shallow flowers. Lord Avebury studied closely the habits of wasps.

numerous and constant to be confined to holidays. If one saw a banker going to the City carrying a bag, as most business men do, he would never guess that the bag contained such things as Sir John Lubbock often carried. A story is told about Sir John once losing his bag, through a fellow-passenger picking it up by mistake. When he reported his loss, the station-master asked what the bag contained, and its owner had to confess that there was only a number of bumble bees in a box.

An Adventure with Ferrets

On another occasion he was taking home some ferrets in a sack, and during the railway journey the animals ate their way out, and proceeded to explore the recesses under the seats, to the great alarm of the naturalist's fellow-passengers. When Sir John had captured the elusive creatures and stuffed them hurriedly into his old leather handbag, which held anything and everything, the ferrets soon gnawed their way out of that as well.

For a long time he tried with great patience

and some success to teach a dog to distinguish between cards bearing different words such as food, tea, bone, water, etc. He also tried to ascertain if bees would come to honey placed out of their sight on a signal being given by playing a musical-box.

In order to prove that insects were able to distinguish colours, and had their preferences and aversions in this respect, he placed equal portions of honey on pieces of paper of different colours in his garden, and carefully noted how many bees visited each.

Popular as a Lecturer

Being specially interested in studying for himself the life-history of individual species of insects, he did much original work, and wrote many papers on entomology. Very frequently, also, he delivered lectures before the Royal Society and other scientific bodies. As a lecturer he was very popular, chiefly because he could make a science interesting without sacrificing accuracy.

If Sir John Lubbock's career were judged only by his work in science, his life would stand out as a most successful and useful one. But the astonishing thing about this remarkable man is the fact that, while engrossed in

science, he was equally successful in business. The same year that he became president of the Entomological Society he was also elected secretary to the London Bankers. It was he who suggested to the London bankers the establishment of a clearing-house system for country cheques, and he had the satisfaction and honour of seeing his proposal almost immediately adopted.

Science Applied to Banking

In the same year that he published his "Prehistoric Times," and presided over meetings of the British Association, Sir John Lubbock also addressed the Statistical Society on the London clearing system as applied to banking. His masterly analysis so impressed one of the reporters that he was described as one "who conducted banking as a science." Here, then, is combined in the same person an archæologist, an entomologist, a scientific lecturer qualified to address the British Association, and a scientific banker.

As if this were not enough for one man, Sir John Lubbock now appeared as a candidate for Parliament. And, strangely enough, events were to prove that as a law-maker he was to win his greatest renown.

SPENDING A QUIET HOUR IN THE SOLITUDE OF HIS STUDY



Sir John Lubbock was extremely fond of home life. Apart from science, business, and Parliament, he had few interests outside his home, and he was content with the most simple style of living. He seldom went to the theatre, and even when he did, he scarcely ever enjoyed himself. But nature was a study of which he never tired.



In 1865, he stood as a Liberal candidate for West Kent, then a Conservative stronghold, and was defeated. John Stuart Mill was on his committee. In 1868, he stood again for the same constituency, and just missed election by a little over fifty votes. A year or so later there was a by-election, occasioned by the resignation of the sitting member for Maidstone, another Kent constituency, and on this occasion Sir John Lubbock was elected.

Although member for Maidstone, Sir John regarded himself as a Parliamentary representative of science, and his first speech in the House of Commons, in 1870, was devoted to the importance of a due regard to scientific training in military education. A perusal of that speech shows clearly that the speaker realized, what had not occurred to most of his hearers, that the warfare of the future would be not altogether a matter of arsenals, but also largely a matter of chemistry and laboratory research.

Sir John Lubbock (he had succeeded to the baronetcy on the death of his father in 1865) was a most indefatigable Parliamentarian, and his career in the House of Commons was a very lengthy one. After representing Maidstone for ten years, he was defeated in that constituency, but the same year (1880) was elected, unopposed, as Member for London University, and held that seat until he became a peer twenty years later.

It is impossible in an article of this kind to mention at any length the numerous Acts of Parliament which he was largely instrumental in getting placed on the statute book. The most important measures with which he was personally identified were, perhaps, the Bank Holidays Act, the Shop Hours Act, and the Preservation of Ancient Monuments Act.

His interest in archaeology was steadfast to the end of his life, and one newspaper playfully described him as the Member for Stonehenge. He did, indeed, on one occasion, deliver a speech while standing on top of one of the monoliths at Stonehenge—but it was not of a political character. In order to preserve some of the Wiltshire monoliths he purchased the ancient site of Avebury.

In connexion with his Parliamentary activi-

RESCUING A COMRADE IMPRISONED AMONG STONES



In many interesting ways Lord Avebury proved that ants have reasoning powers. Once he imprisoned one of these insects between some stones and then watched to see what would happen.

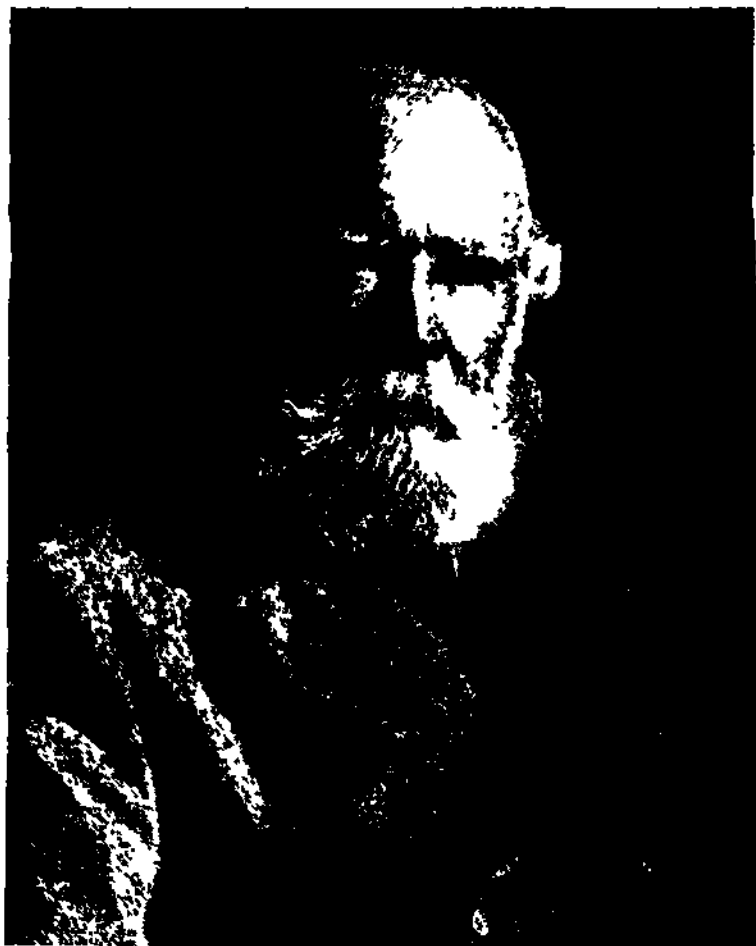
ties, it is worthy of note that Sir John Lubbock was the first president of the Proportional Representation Society (formed in 1884). In other spheres of activity he was the first president of the Bankers' Institute, the president of the British Association in its jubilee year (1881), and the president of the Linnean Society (1881).

Of more general interest, perhaps, because it further reveals the character of the man, is the fact that it was after he had become a Member of Parliament that he took up in real earnest the study of ants, keeping colonies of them in his house for many years. He once introduced to a meeting of learned members of the British Association a wasp that he had tamed, but, as can be gathered from his delightful and well-known book, "Ants, Bees, and Wasps," ants interested him more than any other kind of insect. He recorded the

deaths of two pet queen ants—one aged fourteen years and the other fifteen—as though he felt their loss like that of old friends.

He kept his colonies of ants in tiers of boxes, isolated from the outer world by water, and properly darkened to conform to their natural habitat, yet fitted with glass lid coverings so that they could be observed. Sir John had literally millions of ants, and studied them closely for a large number of years, and

HALE AND HEARTY DESPITE HIS YEARS



Lord Avebury was still a wonderful man at seventy years of age, actively engaged in all his various works. Occasionally he would even indulge in sea-bathing.

the exactitude of his observations can be gathered from the fact, stated above, that he knew to a day when the respective queens of two of the colonies died.

Sir John Lubbock was very fond of home life; indeed, apart from business and science and Parliament, he had few interests outside his home. He very seldom went to the theatre, and scarcely ever enjoyed himself when he did.

His father had a family of eleven children,

John being the eldest, and when the latter married, in 1836, he brought his bride to his father's house at High Elms. When his father died Sir John had to act as the guardian of his younger brothers, several of whom it may be said afterwards greatly distinguished themselves.

By this time Sir John had a young family of his own, so that there was no lack of young life in the learned baronet's household.

Sir John encouraged a love of games in his younger brothers and in his own sons, and, even when he was fifty, he could beat his boys at fives, and at the same age he scored 44 not out in an August Bank Holiday cricket match which was played at High Elms.

As a schoolboy, Lord Avebury did not enjoy the best of health, and to the end of his life he was slimly built, but he took the greatest care in keeping himself fit by outdoor exercise. When he was about fifty he often ran with his brother's pack of beagles in the early morning, at High Elms, before going to the City. A story is told of an occasion when he went with a party of London County Council members out to sea to view the dumping of London's rubbish in the deeps, and dived overboard to have his morning swim in the open sea. Sir John was a non-smoker. When he was over sixty he learnt to ride a bicycle, and even after he was seventy he often took part in a game of golf.

His mother, who was of a more tender disposition than his father, and to whom

Sir John had always been devotedly attached, died in 1872. In 1879, he lost his first wife after a most happy wedded life of nearly twenty four years. There were three sons and three daughters of this marriage. Sir John married his second wife in 1884. There were five children of this second marriage, which was also an ideally happy one, and it is worthy of note that when Lord Avebury's eldest son was fifty, his youngest son was eight. It is also a remarkable fact that the scientist

was himself seventy-three before the large family circle of his own ten brothers and sisters was broken by the death of his youngest brother.

It was in 1885 that he published his much discussed list of "100 Best Books," and in 1887 there appeared that book from his own pen which has been such a stimulus to thoughtful readers in every land, "The Pleasures of Life." Over a hundred thousand copies were sold within a very few years of its first appearance, and it is still selling.

Another aspect of Sir John Lubbock's amazing versatility still remains to be mentioned—namely, his association with the London County Council. When the L.C.C. was constituted, in 1888, Sir John was invited to stand as a candidate for the representation of the City. There were four seats, and six candidates, and Sir John headed the poll, receiving nearly a thousand more votes than Lord Rosebery, who was elected the first chairman of the Council, Sir John

of 1892, when he resigned from the Council, as the strain was affecting his health. He, however, consented to continue his connexion

A MICROSCOPE PICTURE OF A WORKER BEE



Worker bee viewed from the side, showing its hairy body and long "tongue" and wonderful hind legs. This type of bee collects the honey from the flowers and looks after the nursery.

WHAT THE NEST OF A BUMBLE BEE LOOKS LIKE INSIDE



A wonderful self-contained kingdom is the nest of the common bumble bee. Usually it is built into hedge-banks, and the busy workers swarming in groups outside serve as a sign-post to the observer searching for the nest's entrance.

Lubbock being vice-chairman. In 1890, Sir John was made chairman, and this very difficult position he filled until the beginning

as a representative of the City of London, in the capacity of an alderman. In 1892, he published another book, "The Beauties of

Nature," and, before leaving that subject, it may be mentioned that, in all, Lord Avebury wrote twenty-six books.

In the latter portion of his life Lord Avebury came to regard authorship as the pleasantest part of his work, and, as the weight of his years increased, he dropped some of his public labours in order that he might devote more time to his books. Yet he was so popular as a public speaker, and his influence was so great in many directions, that his services were in constant demand at public gatherings, and on such occasions as the opening

of new public libraries, etc. He knew everybody worth knowing in the financial, scientific, and political worlds. For many years the

breakfasts at his London house, through his generous hospitality, were occasions for meeting very many famous people.

He was still a wonderful man at seventy years of age, actively engaged in politics, authorship, and science; and still so fit that he occasionally bathed in the sea near Kingsgate Castle, his seat close to Margate. He also played golf regularly. It was when he was seventy that his Early Closing Bill for shops became law, after a persevering agitation which had lasted about thirty years.

Fondness for Home Life

There was no happier feature of Lord Avebury's old age, however, than his home life and the companionship of his younger children. We can imagine no more charming picture of this venerable scientist, whose name was a household word throughout the world, taking his youngest son, aged seven, to see his first pantomime.

At seventy-four years of age, we find him being installed as Lord Rector of St. Andrew's University, giving addresses on free trade and the gold reserve, speaking in the House of Lords in favour of proportional representation, and giving evidence before a committee of the House of Commons in favour of daylight saving.

One of his last scientific investigations was a microscopic inquiry into the shapes of flower-pollens.

When he became ill from anæmia, at seventy-eight, the aged scientist found a melancholy amusement in the study of his own case, remarking that, after careful calculation, he had ascertained that his blood was deficient in corpuscles to the alarming extent of several millions of millions.

Yet even after this he continued to participate in golf, and delighted to have company and hold dances in his house. His regular home was still High Elms. From this house he had journeyed as a lad with his father to the bank, and right up to the last year of his life he filled it with happy memories.

His Last Public Address

At seventy-nine, he addressed his last public meeting, at the Cannon Street Hotel, London, on the question of free trade, speaking with his usual clearness, and without referring to his notes.

Soon after celebrating his seventy-ninth birthday, Lord Avebury passed peacefully away, at Kingsgate Castle, on the 28th May, 1913, and was buried at Farnborough, a short distance from his old home.

[See Life by H. G. Hutchinson (1914).]

LORD AVEBURY'S STately HOME NEAR MARGATE



The walls of Kingsgate Castle, near Margate, sheltered many curious inhabitants, for Sir John Lubbock was ever adding some new animal or insect to his collection. The great scientist loved his home, and was never happier than when seated in his study striving to probe some of the fascinating secrets of nature.

For biographies not included in the Groups see detailed Index

A MASTER of SENTIMENTAL COMEDY

How Richard Brinsley Sheridan, Having Broken the Shackles of Tradition, Restored Vitality to English Comedy, and Later Became Both Orator and Statesman

ABOUT six o'clock in the evening, on the 4th May, 1772, a party of gentlemen descended from a chaise and four at the entrance to Hyde Park, London, and walked briskly in the direction of a secluded spot known as "The Ring." A duel was to be fought, and the affair concerned the honour of a young lady.

As the party drew near to the chosen spot, the seconds of both participants looked anxiously around them, and twice a move was made in order to escape the eyes of loiterers or police officers. Major Mathews, who was the offending party, took advantage of these manoeuvres to postpone an engagement which he obviously dreaded. When secrecy seemed to be assured, he complained that the ground was uneven. A further move was made, which unfortunately brought the party once again within sight of possible observers.

Finally, it was agreed to adjourn to the Bedford Coffee House, at the corner of Henrietta Street and Bedford Street. Here a private room was engaged, and, in the dim light of candles held by the seconds, the antagonists drew their swords and attacked each other.

The result of the scuffle in the semi-darkness and in cramped surroundings was, not unnaturally, inconclusive. After a few passes Sheridan struck his opponent's sword aside. Upon this Major Mathews' second exclaimed, "Don't kill him," and caught hold of Sheridan's arm. Several times Mathews called out, "I beg my life," but afterwards, there being some dispute among the seconds as to what had actually happened, he declared

that the duel had not been fought to a clear decision. Nevertheless, in spite of Sheridan's taunts, he refused to draw his sword again.

After much argument and persuasion on the part of the seconds, the duel was declared over in Sheridan's favour, and Mathews wrote

out a formal apology for the insulting words, published in a Bath newspaper, coupling Sheridan's name with that of Miss Elizabeth Linley, which had given rise to the quarrel.

Neither side, however, felt that there had been any true satisfaction in this "ungentlemanlike scuffle," as Sheridan described it, and so, a couple of months later, on the 1st July, the party again assembled, this time at the White Hart Inn, Bath, and drove out to Kingsdown, where, at three o'clock in the morning, a prolonged and ferocious tussle took place.

Mathews seemed to have recovered his courage, and Sheridan had certainly lost none of his. Before long both swords were broken and the duellists rolled on the ground, stabbing at each other with their dagger-like weapons. Sheridan was badly wounded, and the portrait of Miss Linley that he carried in his breast pocket was soaked in blood. His

seconds implored him to sue for mercy, but he refused. He could not understand why his rapid strokes at the most vulnerable parts of his opponent's body failed to hurt him. Afterwards, it was discovered that Mathews wore mail armour underneath his clothes. The fight ended in panic. Believing that Sheridan was dead, all the others made off, and he was left lying on the ground.

WHERE THE DRAMATIST DIED



No. 14 Savile Row, London, the house in which Sheridan died. While on his last sick-bed he was obliged to sell valuable pictures to keep his creditors at bay.

More exhausted with loss of blood than seriously hurt, Sheridan managed to crawl to a cottage, where a labourer attended to him and allowed him to rest. Here the postilion of the chaise in which the party had driven to the scene found him, and carried him back to the White Hart Inn. A few days later Elizabeth Linley heard of the disastrous conclusion to the duel. "My husband," she cried out, thus inadvertently revealing a secret hitherto kept from her parents.

Why Miss Linley Loved Sheridan

In this manner did Sheridan, when only twenty-one years old, risk his life in chivalrous devotion to the beautiful Eliza, whom he had long wooed against older and wealthier suitors. "It was not your person," Miss Linley wrote to him once, "that gained my affection. No, Sheridan, it was that delicacy, that tender compassion, that interest which you seemed to take in my welfare, that were the motives which induced me to love you." After the duel, however, she discovered that she had been in love with her "Horatio" all the time.

There are many tangled threads in the story of Sheridan's romantic devotion. Elizabeth was the daughter of Thomas Linley, a musical composer of note in Bath. At sixteen, when Sheridan first met her, she had already attracted widespread interest both for her beauty and her singing. As the *prima donna* of her father's concerts, she was naturally much in the limelight, and it was this circumstance that led to the difficulties from which the most devoted of her lovers rescued her.

The social atmosphere of Bath in those days was uncongenial for a young lady whose beauty and accomplishments made her the subject of daily discussion, and whose most innocent assignation was the occasion for gossip. Not for nothing did Sheridan pass his early manhood in Bath, for it was in that gay resort that he learned the ways of society and the harm that can be done by a foolish word simpered behind a lady's fan.

An Atmosphere of Scandal

Bath, in fact, was a school for scandal, and for Elizabeth Linley a hard and cruel one. So many were the stories told about her that when Samuel Foote, the comedian, visited Bath, he learned within a few hours enough scandal to provide him with material for a three-act play, which he entitled *The Maid of Bath*.

To the credit of the unscrupulous Foote it must be observed that he at least portrayed Elizabeth in her true colours—as an innocent, pure-minded girl, bewildered by the advances of her many suitors, exploited by a managing mother and a father whose professional main-

stay she had the misfortune to be, and the victim of malicious chatter.

One of these suitors, Walter Long, she contrived to rid herself of with considerable skill, and, although the unexpected result was entirely undesigned, with profit. She made a personal appeal to this wealthy squire, thrust upon her by her match-making mother, and moved him to compassion. He not only agreed to give her up, but actually settled £3,000 upon her, the amount being described as "damages" to the outraged Linleys in order to shield Elizabeth. The more important of her other suitors were N. B. Halhed, an Oxford graduate and the friend of Sheridan, Major Mathews, the most unworthy of them, and Sheridan himself.

Son of an Actor and Educationalist

The exact date of Sheridan's birth is unknown, but he was probably born during September, 1751, at Dublin, where his father, Thomas Sheridan, was then dividing his time between acting at the Smock Alley Theatre and working out Utopian schemes for the improvement of the human race by the teaching of oratory and rhetoric. Three years later the family removed to London, and lived in Bedford Street, Covent Garden.

Although Thomas Sheridan had once seriously rivalled David Garrick, his acting days were over, and he spent the rest of his life wandering from town to town, giving his "Attic Entertainments" and endeavouring to find support for his curious educational beliefs. The Sheridan children had little home life. Mrs. Sheridan was a lady of successful literary pursuits, her novel, "Memoirs of Miss Sidney Bidulph," being described by Samuel Richardson as the best of its kind at the time. She was always busy writing other novels and also plays.

When eleven, after some useful preliminary training by his father and attendance at a preparatory school, Sheridan was sent to Harrow. Although not an industrious boy, he quickly distinguished himself by his vivacity and uncommon gifts of mind. A contemporary Harrovian says that "he had just enough industry to protect him from disgrace."

An Incurable Practical Joker

He wrote clever lampoons and epigrams, and studied the Greek orators with almost a conscious eye upon a political career. He was an incurable practical joker, and his Irish sense of humour often led him into difficulties. When called upon to recite the orations of Demosthenes at the annual contest for the silver arrow, he insisted upon appearing in the uniform of an English general, to the consternation of the authorities.

In 1766 Sheridan's mother died. He left Harrow two years later, and joined his father at a new establishment in Frith Street, Soho, where he met many prominent men of the time, for his father was a man of note, in spite of his eccentricities. Ultimately, the elder Sheridan migrated to Bath, where once more he set up an educational establishment.

A university career was denied Sheridan, but he kept up a cultured correspondence with his friend, N. B. Halhed, who had gone to Oxford. From these effusions sprang Sheridan's first serious literary effort, a metrical translation of *Aristænetus*, undertaken in conjunction with Mr. Halhed. There followed a farce, *Jupiter*, which the collaborators submitted to Garrick and Foote, but without success.

Social Bath

More important than these first experiments in writing was Sheridan's observation of the social atmosphere of Bath. He was busy studying the originals of Mrs. Candour, Lady Sneerwell, and Sir Benjamin Backbite, and the manners of that high social life which he was afterwards to satirize. At the same time he was developing the gift of witty speech, which was to make him an ornament of the polished society in which he moved so easily.

It was before he had determined upon a definite profession that the romantic interlude occurred which profoundly affected his whole career. Elizabeth Linley, sure of his friendship among so many faithless lovers, poured out her heart to him. It was to Sheridan that she confided her plan to escape from a life that had become intolerable by entering a convent in France.

Sheridan behaved with great gallantry. He proposed an elopement, without suggesting that it should be for any other purpose than that of freeing Miss Linley from her troubles, and he had soon made all the necessary plans and arrangements.

At the appointed hour, Miss Linley, in a half-fainting condition, was carried in a chair from her parents' house to a post-chaise. Sheridan

SHERIDAN'S DEVOTED AND BEAUTIFUL HELPMATE



Gainsborough's famous picture of Miss Linley and her brother. Sheridan's wife was as good as she was beautiful. She was devoted to her brilliant husband, and there is little doubt that he derived from her much of his inspiration as a dramatist.

had provided a lady chaperon. Scarcely had the post-chaise started on its journey than Major Mathews was encountered, on his way to the Linleys, but Sheridan evaded him with a clever excuse.

There followed a breathless ride to London, where Sheridan sought out friends and introduced Miss Linley "as an heiress who had consented to be united to him in France." Passages were then obtained, together with letters of introduction to friends across the

Channel, and the runaways arrived at Dunkirk without mishap.

The elopement now took on quite a different character. Sheridan's chivalrous devotion never wavered, but at some time during the long journey he appears to have awakened Miss Linley to a sense of his almost intolerable situation. At any rate, she consented to marry him, and at Calais the young couple went through a form of marriage, which was not legally binding, since both were minors, and which neither of them regarded as more than a preliminary to a later ceremony.

Miss Linley then entered the convent, where she intended to remain "either till Sheridan came of age, or till he was in a situation to support a wife." But these hopes were quickly

SHERIDAN ADMINISTERS A CUTTING REBUKE



"Where," asked Sheridan in the House of Commons, "shall we find a more foolish knave or a more knavish fool?" "Hear, hear," shouted a troublesome member. Sheridan turned round and suavely thanked him for his information.

thwarted. Miss Linley's retreat was discovered, and she was brought back. A libellous account of Sheridan's part in the elopement appeared in a Bath paper, signed by Major Mathews. The two duels followed.

Eventually, however, the course of true love ran smoothly. The young couple were united, and set up housekeeping on an extravagant scale in London, at Orchard Street, Portman Square. By this time Sheridan had entered the Middle Temple, but his marriage determined him upon a more ambitious career. While it lasted, there was Mr. Long's £3,000 to fall back upon, but the law was not likely to provide a sufficient income for the lavish scale of living prescribed by the social set which the young Sheridans had entered.

The romance attached to the brilliant match had aroused widespread interest. Fashionable London flocked to the house in Orchard Street to hear the beautiful young wife sing, and to

admire the witticisms of the promising young husband. But Mrs. Sheridan sang no more professionally, although she could have commanded a high salary. Sheridan resolutely refused to allow her to contribute to the household expenses by this means—a course of action for which he was commended by the great Dr. Johnson.

In November, 1774, Sheridan announced to his father that he had written a three-act comedy, which was to be performed at Covent Garden, and for which he expected to receive at least £800. Meanwhile, he was also busy writing articles upon political subjects for the reviews, criticisms of books, and much verse. Stimulated by happiness and the need to make an immediate success of his career, he worked with surprising industry, and yet, at the same time, contrived to give the impression that he merely threw off his literary efforts at odd moments during a life of social pleasure. This pose he maintained all his life, and nothing pleased him better than to be regarded as a dilettante, although, as his manuscripts show, he actually worked very hard, writing sentences again and again until they had been brought to polished perfection.

His First Comedy

The Rivals was first performed at Covent Garden on the 17th January, 1775. Owing to the great length of the play and the poor performance of the actor entrusted with the part of Sir Lucius O'Trigger, the result was unsatisfactory. After this first performance it was withdrawn for alterations, and brought out again on the 28th January, with a different actor taking the part of the Irish baronet.

It was instantly recognized that a new playwright had leapt suddenly into fame. As a writer of sentimental comedy Sheridan has never been equalled, and in *The Rivals* his brilliant talent is shown at its freshest. Not for many years had a comedy so natural and spontaneous, and so true to the life that it depicted, been acted on the English stage—with the exception of Goldsmith's *She Stoops to Conquer*. Sheridan had broken away from the dull, artificial tradition of the age, and brought back to English comedy the vitality and truthfulness achieved by Wycherley and Congreve in the Restoration period. *The Rivals* was performed for fifteen nights in succession, in those days considered a successful run.

The young playwright quickly followed up his first success with two other plays, written in the same year. *St. Patrick's Day, or the Scheming Lieutenant*, a light farce, was produced at Covent Garden on the 2nd May, 1775. It was written in forty-eight hours, in order to provide a benefit performance for Lawrence Clinch, the Irish actor, who had retrieved the fortune of *The Rivals*.

By the following November Sheridan was ready with *The Duenna*, a comic opera, the music for which was composed by his father-in-law, Thomas Linley. This achieved the remarkable run of seventy-five nights.

Sheridan was now a celebrated man. He had also made some money, though not as much as he needed. Dazzled by his successes, he took a step which was to prove disastrous, for with it began that long series of entanglements with moneylenders and creditors which cast so deep a shadow upon an otherwise brilliant career. Hearing that David Garrick was about to retire from the stage, he boldly entered into negotiations with the great actor to purchase his share in the Drury Lane Theatre Company.

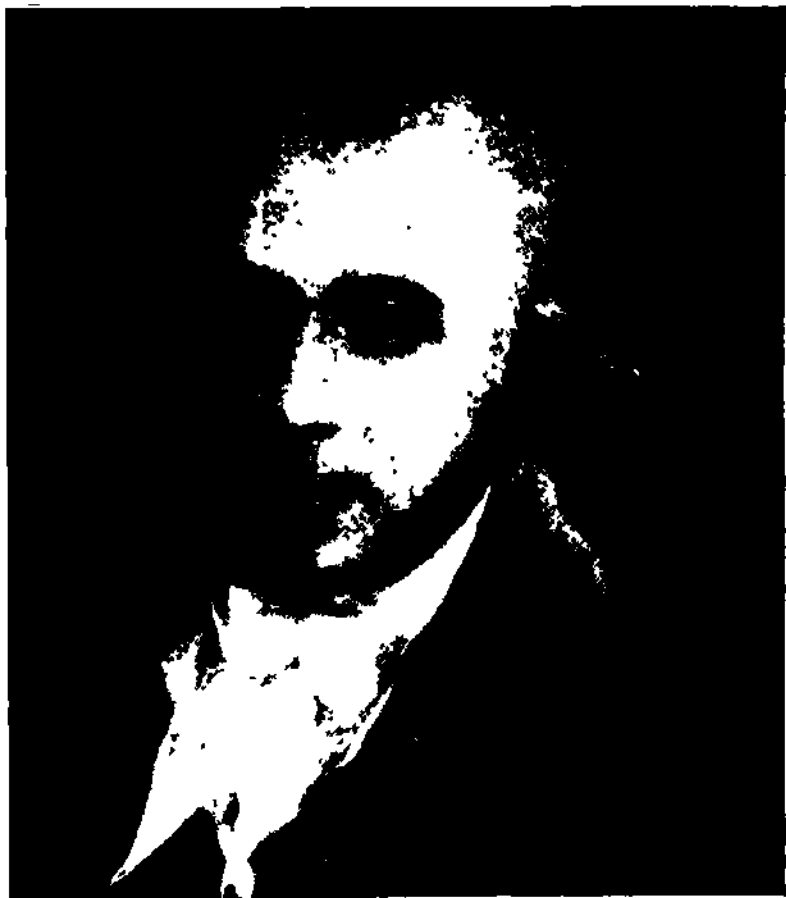
His Greatest Play

The sum paid by Sheridan and two partners was £35,000, and to this Sheridan contributed £10,000, borrowing most of it on mortgage. He took control of the theatre

to restore confidence in the Drury Lane audiences. "Finished at last, thank God," wrote Sheridan on the prompt copy of the play, and the harassed prompter added "Amen."

So great a sensation was produced by this play that even the exciting incidents of the American war were temporarily forgotten. It ran for seventy-three nights and realized £15,000. After this success Sheridan was widely acclaimed the most original playwright

THE ONE-TIME MANAGER OF DRURY LANE THEATRE



on the 8th May, 1776, after having experimented unsuccessfully with the work of others, produced his greatest play, *The School for Scandal*.

It was well that the new manager of Drury Lane Theatre brought out a masterpiece in time to disarm the criticisms already aimed at him from all sides for his rash and negligent management. *The School for Scandal* was actually put into rehearsal before the last scenes were written, such was the need

of his age. Within two years he had taken the town by storm and had ensured immortality for his name.

Yet, with the exception of a light, topical farce, *The Critic* (1778), and a tragedy, *Pizarro* (1799), Sheridan completed no other work for the stage during the remaining years of his eventful life. From boyhood he had hankered after the career of a statesman, and now that he had achieved an eminence in London society

that brought him the friendship of influential men he used this advantage to enter Parliament. In 1780 he was elected member for Stafford, and he took his seat as the friend and supporter of Charles James Fox.

Sheridan had great gifts as an orator, but he was not always wise in his political friendships, and he occasionally became involved in difficult situations, from which he only extricated himself by his quickness of wit. He held

THE SECOND MRS. SHERIDAN



"Mrs. Sheridan and Son," after the painting by Hoppner. The second Mrs. Sheridan, whom the dramatist married in 1795, was Esther Jane, eldest daughter of Newton Ogle.

office as Under-Secretary for Foreign Affairs in the Rockingham ministry of 1782, and was Secretary of the Treasury in the coalition government of 1783. His greatest parliamentary triumph was his part in the impeachment of Warren Hastings. In the peroration of his final speech in this case he reached a very high level of oratory:

Let the truth appear, and our cause is gained. It is to this I conjure your Lordships for your own honour, for the honour of the nation, for the honour of human nature now entrusted to your care; that I, for the Commons of England speaking through us, claim this duty at your hands. They exhort you to it by everything

that calls sublimely upon the heart of man, by the majesty of justice which this bold man has libelled, by the wide fame of your own tribunal, by the sacred pledge which you swear in the solemn hour of decision, knowing that the decision will bring you the greatest reward that ever blessed the heart of man—the consciousness of having done the greatest act of mercy for the world that the earth has ever yet received from any hand but Heaven's.

"Struggling against Calumny"

Sheridan's middle and later years were spoiled by debt and disappointment and clouded with grief. He was constitutionally incapable of economy, either in his own affairs or those of the theatre that he managed so badly. "All my life," he said to a friend, "I have been struggling against calumny." He was not a dishonest man, but his carelessness about money obligations, and his ingenuity in evading responsibilities, sowed dragon's teeth, which bore fruit in misery and almost dishonour.

For many years Drury Lane Theatre was his only source of income, and on two occasions the building had to be re-erected at great expense. In 1791 it was condemned as unsafe, and in 1809 the new building was destroyed by fire. Apart from the sympathy which such misfortune arouses, it is difficult to exonerate Sheridan from gross culpability in his capacity as theatre manager. He often owed his company their salaries, one of the greatest sufferers in this respect being Mrs. Siddons.

In 1792 his beloved Eliza died of consumption. Sheridan was not the man to endure sorrow stoically. For the next three years he gambled desperately at the notorious Brooks's Club, and involved himself still more hopelessly in debt. While he sat in Parliament his creditors could not distrain upon him. In 1812, however, in spite of desperate efforts to influence the franchise, he was defeated, and no time was lost in taking proceedings against him.

In a "Sponging-house"

He spent some time in a "sponging-house," but friends came to his assistance, and he struggled on for another four years, fighting desperately against want and ill-health. While on his last sick-bed he was obliged to sell valuable pictures in order to keep his creditors at bay. He died on the 7th July, 1816, and was buried in Westminster Abbey.

Sheridan remarried in 1795, the only issue being a son, Charles, who became an author of note. Thomas Sheridan, the dramatist's son by his first wife, became a well-known poet, and he was the father of Lady Dufferin, Mrs. Norton, and the Duchess of Somerset, three celebrated beauties.

[See Works edited by F. Stainforth (1901), and Lives by W. Nichol (2 vols., 1909), L. C. Sanders (1890), and W. F. Rae (1898).]

The FATHER of MODERN PHILOSOPHY

Immanuel Kant's Overthrow of the Old Systems of Testing Knowledge and Discovery of a New Method Which Has Determined the Course of Speculation to This Day

THERE remains in the minds of most ordinary folk a picture of the philosopher as an elderly, unworldly, unpractical man, a being given over entirely to his speculations and completely out of touch with the pleasures, anxieties, interests, foibles, and fashions of his contemporaries.

Few of the great philosophers have really come up to this standard of oddity, but Immanuel Kant, father of philosophy as we know it to-day, came very near to it. De Quincey described him once as an "old, arid, and ardent metaphysician," and so, in truth, he was to the outward glance. Nevertheless, Kant played a most important part in the development of knowledge, a part which we cannot afford to ignore. Nor was he, on closer inspection, quite so uninteresting personally as he appeared on the surface.

Immanuel Kant was born on the 22nd April, 1724, the fourth of his parents' numerous family, the majority of whom died in their infancy. His father was a saddler and harness-maker, living in the town of Königsberg, in what is now the Baltic coast of East Prussia.

The Kants (or Cants) had originally lived in Scotland, but had emigrated thence first to Memel, then to Königsberg. In fact, to this day, the name Cant is by no means uncommon in the Highlands.

During the first half of the eighteenth century the district around Königsberg was a perfect stronghold of piety, in which the "Quietist" school of religious thought waxed and flourished exceedingly. Kant's parents inclined largely to "Quietism," and their household was a deeply religious one. In his later

years their son completely abandoned these beliefs, in which he was brought up, but continued to think highly of the Quietist doctrines none the less, for Quietism, as he said, produced "peace, cheerfulness, and an inner harmony with self that was disturbed by no passion."

TAKING HIS CONSTITUTIONAL



Kant regulated his life with clockwork precision. Every day, whatever the weather, the famous philosopher walked for at least an hour after his dinner.

Although Kant was a poor, weakly little boy, his intellectual vivacity and sprightliness were so uncommon as to attract the attention of one Schulz, director of the Collegium Fredericianum in Königsberg. By his influence the boy was admitted to this school during his tenth year, in the hope that he might pass on to the theological faculty of Königsberg University, and then become a minister of religion. Kant progressed rapidly with his studies, and soon became the finest classical scholar in his school, from which he passed on to the university in 1740. There mathematics and physics became his principal delights, and through the influence of Knutzen, the quite extraordinarily gifted mathematical professor, he determined to abandon all thoughts of entering the Church.

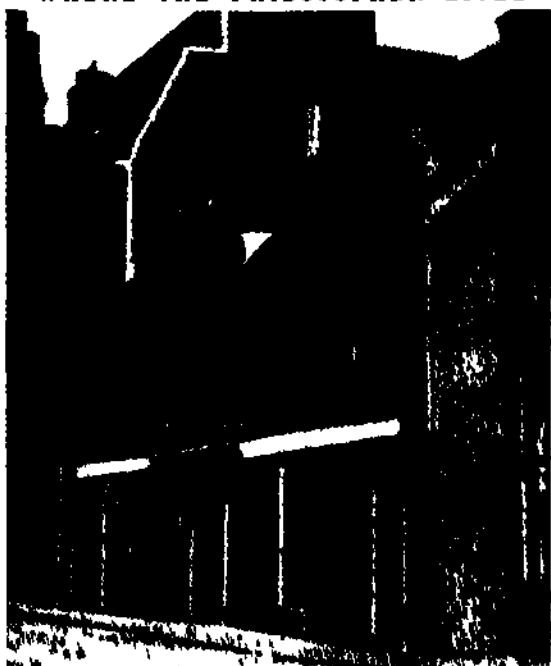
In 1746 his father died, leaving the family in very straitened circumstances, and Kant, perforce, left his congenial studies, which were already all he cared for in life, to take a position as a private tutor. During this phase in his career he made his first and last appearances in society. However, he soon acquired an easy grace and polish of manner, which became habitual with him, and which in later years vastly surprised those who came to see him in his anchorite's seclusion.

In 1755, after some years of pedagogy, Kant

was enabled to complete his university course through the kindness of an old family friend named Richter, and took his degree as *privat-dozent*. This degree obtained a minor and subordinate academical position for him at the university, in which he remained, labouring and writing, for fifteen years. His philosophic views and outlook had by then grown more or less fixed, nor did he entertain any other ambition than to be allowed to pursue his studies uninterrupted.

Twice he hoped to obtain a professorship, but each time he was bitterly disappointed.

WHERE THE PHILOSOPHER LIVED



No. 2 Prinzenstrasse, the modest dwelling in Königsberg which Kant occupied throughout his life. It stood till 1895, when it passed into the hands of the housebreakers.

Such a promotion would have relieved him from much drudgery, and placed a wealth of time at his disposal—the only sort of wealth Kant ever coveted. At last, however, in 1770 he was appointed to the chair of logic and metaphysics at Königsberg University, and succeeded to the abundant and dignified leisure that he desired.

For eleven years he lectured and toiled unceasingly at his *magnum opus*, which he published under the title of a "Critique of Pure Reason." In spite of its novel terms, occasional obscurity, and involved difficulties, Kant's new philosophy, thus launched upon the world, soon began to make itself generally known. It spread throughout Germany, was expounded and discussed in all the great universities of

Europe, and found its way into the discussions of the College of the Society of Jesus at Rome.

Naturally, fame followed in the footsteps of this popularity, and year by year Kant grew more and more renowned as a savant. Earnest young students and grey-headed old philosophers flocked to Königsberg to consult this stream of wisdom at the fountain-head. The Prussian Government consulted Kant as an oracle on all subjects, and often propounded questions quite outside the poor philosopher's scope. For instance, on one occasion he was asked to decide whether the then newly discovered process of vaccination carried with it any sort of stigma of immorality.

His Works Officially Banned

In 1792 there occurred the only outside event which disturbed the ordered quiet of Kant's life. Von Zedlitz, who had just been appointed Prussian Minister of Spiritual Affairs—a peculiarly Prussian office—had decided to exercise a rigid censorship over all philosophical writings which did not conform with his own rather narrow interpretation of Protestant Christianity. Kant's works instantly met with official displeasure, and their publication in Berlin was forbidden.

Undaunted, Kant replied by publishing at Königsberg University a treatise entitled "On Religion within the Limits of Reason alone," which he well knew would displease Von Zedlitz. This action precipitated an official fury, and poor Kant was forced to promise that he would henceforth neither lecture nor write on any religious subject. Five years later Frederick William II of Prussia died, and Von Zedlitz vanished from official life. So Kant was free once more to do exactly as he chose.

Forty Years of University Work

From 1794 to 1797 Kant had gradually been giving up his official duties, and in the latter year he retired altogether, having been actively engaged in university business for more than forty years. His health, strength, and mental powers began sadly to deteriorate. First his legs grew unsteady, then his sight failed him, and finally his health broke up altogether, though to the last he was capable of breaking out into flashes of his old brilliance. By the beginning of 1804 it was manifest that he could not live much longer. All the doctors could do was to preserve the small flickering flame of his life for a few more weeks. On the 12th February, a few days before his eightieth birthday, he died quietly. His last words were symbolic: "It is enough."

Such are the ordinary enough events which filled the life of Immanuel Kant, and arid and dull enough they seem. But the man who passed this quiet and measured life of routine

was very far from ordinary. He stood only just five feet high, stooping greatly, which, of course, diminished his stature. He was extremely thin and fragile looking, with a high, square forehead, large head that looked too heavy a burden for his thin neck, fair hair, fresh complexion, and brilliant light blue eyes of a perfectly weird and extraordinary depth and power. This great philosopher, in fact, looked more like an elf or goblin of some kind than a human being, which impression was all the more accentuated by his suave and polished manner.

A victim to the very worst of health, Kant could only hope to avoid illness by living a life of the strictest routine and regularity. At five o'clock in the morning his faithful valet called him, and not once in thirty years did Kant fail to get up immediately. For two hours he read, then from seven to nine o'clock he lectured, for university hours were unusually early in those days. From his lecture-room he passed immediately back to his study, where he sat writing until one o'clock. At this hour he would put on his hat and coat and sally forth to a restaurant for his dinner, his only regular and substantial meal of the day.

Object of Curiosity

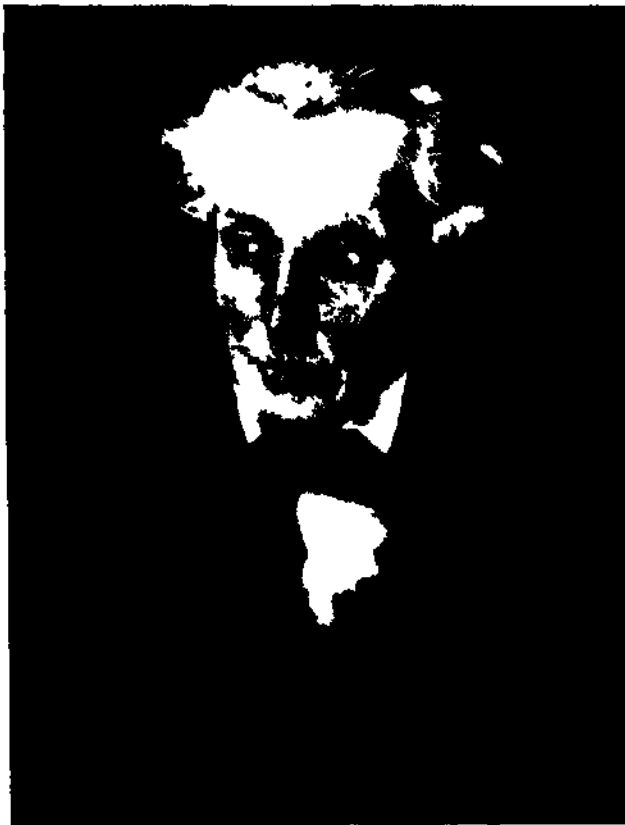
After he had risen to fame as a philosopher, crowds of inquisitive people would enter the eating-house to gape at this famous little gnome-like man; so Kant, who detested being made an exhibition, patronized a large number of hostelries irregularly, in order to defeat these ill-mannered intruders. Favourite pupils and friends, on the other hand, were welcomed warmly at his table, and, since he delighted to talk over his meal, this session at the restaurant was often prolonged until four or five o'clock in the afternoon.

After dinner, there followed a walk of at least an hour, whatever the weather, and, though sociable during his dinner, Kant could not bear company when walking, since he became absorbed in his speculations and resented any distraction. It is related that some footpad once conceived the notion of murdering the lonely professor during one of his walks. Seeing what a tiny little creature his intended victim was, the murderer relented, ashamed of his intentions, and Kant walked on, wrapped in speculation, and for ever remained in ignorance of his narrow escape. Returned home, the philosopher spent an hour or two in preparing his next day's discourse, and then read steadily until nine or ten o'clock, when he retired to bed.

Year in, year out, winter and summer, he adhered rigidly to this routine, and nothing distressed him so much as any event which forced him to break it.

Although Kant's philosophical works are written in a precise, dry tone, suited to learned exposition, he was an agreeable and fluent lecturer, adopting an altogether lighter tone than he did when expressing himself on paper. He would lecture gazing intently at one of his pupils, noticing by his expression whether what he said was understood or not. As he gazed at

AUTHOR OF THE "CRITIQUE OF PURE REASON"



Although he passed his life in the service of abstract truth, Kant was essentially human, and at his death he was mourned as a friend and companion by the folk of his native Königsberg.

his "victim," Kant would at once spot any slight untidiness or disrepair of his clothes.

Meticulously tidy himself, a button or neckerchief awry at once distracted his attention from what he was saying. It is said that on one occasion he could not continue with his lecture owing to the sad fact that a button was missing from one student's coat. Kant's students all respected and admired their eccentric professor—in fact, they were devoted to him, and an invitation to join his table for dinner was a much-sought-after honour.

Kant's greatest contribution to knowledge was his invention of what is called "critical" philosophy, whereby he inquired into how we come to "know" things, and what kinds of knowledge are possible to our minds. His greatest point was that in each experience we meet with there are two distinct parts: one arising out of ourselves, the other arising from the physical world outside us. From this he concluded that objects are not exactly as they seem to be to our senses, but that the thing we see, or feel, or hear, or taste, or smell, must be different from the "thing in itself."

Guided by these principles, Kant proceeded to embark upon a critical investigation of the relations of the "ego" to the rest of the world surrounding it. He discovered that the "ego" knows some things *a priori*—that is, without

Although his life-long devotion to intellectual pursuits possibly blunted the emotional side of his nature, yet in all dealings he was the soul of honour, truth, candour, and generosity. He had, however, little or no enthusiasm for the æsthetic aspects of life. Natural beauty, music, poetry, and painting made little appeal to him. He regarded them as quite harmless fads, which possessed little or no relevance to one who was solely interested in casting his plummet deep down into the well of intellectual truth. As a friend he was faithful and devoted, but his manner towards all women remained reserved and distrustful all his life.

His Noble and Lofty Nature

Despite the gaps in his character, we cannot but admire Kant for his devotion to his self-appointed task, and for his genuinely noble and

lofty nature. Success and recognition brought no vanity into his demeanour, and he remained to the end as simple and unaffected towards all men as when he was a student at the Collegium Fredericianum.

Few men are strong enough to give their whole life to the service of abstract truth and to remain unspoiled by their devotion. Many great philosophers have grown incredibly irritable, selfish, or

vain, or even unbalanced, as the result of their intense and solitary mental preoccupation.

Almost alone among his peers Kant remained a citizen of the world as well as a philosopher, and on his death he was mourned as a friend, as a companion, and as a generous helper in times of need by the folk of Königsberg, even more sincerely than he was mourned by the world as a savant.

Kant's body, originally laid to rest in the vault of Königsberg Cathedral set apart for distinguished members of the city's university, now lies in an open vault. All Prussia paid homage to him at a public funeral, which was held in contradiction to the wishes expressed in his will. As was said during the elaborate and impressive funeral ceremony: "Peace be to his dust, and to his memory everlasting honour."

[See "The Critical Philosophy of Kant," by E. Caird (1889), and *Lives* by W. Wallace (1902) and F. Paulsen (1902).]

WHERE THE GREAT THINKER LECTURED ON PHILOSOPHY



View, from the river Pregel, of the old university of Königsberg, where Kant was a professor. It is now the city library. After working in a subordinate academic position for fifteen years, Kant at last obtained, in 1770, the chair of logic and metaphysics.

basing its knowledge upon experience. For example, there are numerous facts in mathematics which we know, or *can* know by making a certain calculation, but of which we most certainly had no previous experience upon which to base our knowledge. On these lines Kant was able to build up an entire philosophic and ethical system, portioning out to what extent the physical universe and to what extent the individual himself was responsible for any given state of mind or piece of knowledge.

Some of his results have since been questioned, tested, and found wanting, but a deal of his fabric still stands good. At the least, Kant brought into philosophy a new set of criteria, and a new method for testing the validity of any statement, which have proved of inestimable value ever since to his successors in the age-long search after truth.

In character this learned and eccentric little man was almost a paragon of the virtues.

For biographies not included in the Groups see detailed Index

PIONEERS of the TEXTILE INDUSTRIES

Arkwright, Hargreaves, Cartwright, Crompton, and Jacquard, by Whose Inventive Genius Britain Has Attained Her Proud Position as a Manufacturing Country

THANKS to the genius of her inventors and the enterprise of her business men, Britain has gained a substantial start of thirty or forty years in the economic race in which the world has been engaged during the last hundred years, a start which has enabled her to maintain her position as the greatest manufacturing country of the world.

Ever since the Industrial Revolution, when Great Britain first established her supremacy in the commerce of Europe, cotton and textile manufactures have formed one of Britain's most important industries. The cotton and woollen manufactures remain to day the chief support of Lancashire and Yorkshire, and these two counties owe their prosperity to the pioneer inventors Arkwright, Hargreaves, Cartwright, Crompton, and Jacquard.

Richard Arkwright was born at Preston on the 23rd December, 1732, the youngest of a family of thirteen. His parents were in very humble circumstances, and could not afford to give their numerous children much education. Arkwright, in fact, could scarcely write more than his signature, and when still in his boyhood he was set to learn the barber's trade, in order to ease the strain on the family resources. For some years he was at Kirkham, near Preston, first as an apprentice, and then as a barber's assistant.

It was not long before he determined to strike out on his own account, and accordingly he set up in business at Bolton. He had secured a secret process whereby hair could be effectively dyed, which in those days when everyone wore a wig, was of considerable value. He therefore, became an itinerant hair merchant, but still kept on his barber's business in a cellar. Outside the shop he displayed a sign, reading:

"Come to the subterraneous barber. He shaves for a penny." His rivals, after a few months, had to reduce their price to a penny also, whereupon Arkwright immediately cut his to a halfpenny.

Arkwright married on the 31st March, 1753, his wife being the daughter of a Bolton schoolmaster, but the union was of short duration. He again married on the 24th March, 1761, his second wife, who had personal property valued at about

£400, being a native of Pennington, near Leigh, named Margaret Biggins. Being gifted with a strong natural bent for mechanics, and now that he was provided with funds, he proceeded to experiment ceaselessly. He was even attacked by the chimera of perpetual motion, and employed a clockmaker friend at Warrington to make parts of a perpetual motion machine for him. Needless to say, this project was a failure.

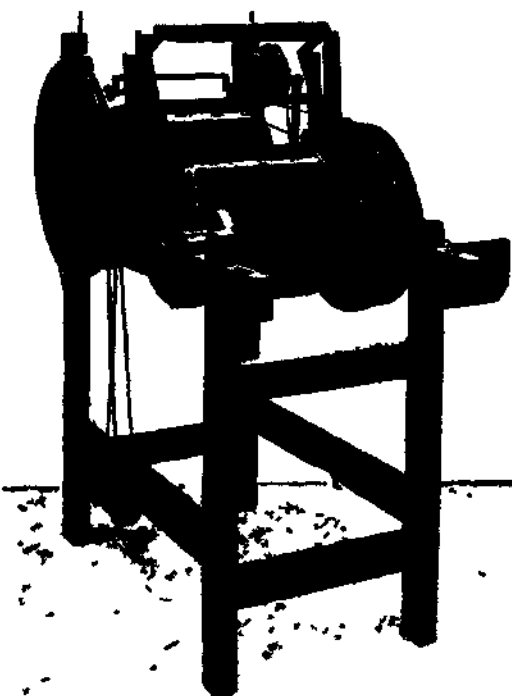
Arkwright, however, possessed all the qualifications for material success. According to Baines's *History of Cotton Manufacture*,

his natural disposition was ardent, enterprising, and stubbornly persevering, his mind was as coarse as it was bold and active, and his manners were rough and

unpleasing. He was well suited to be an industrial pioneer in those early tumultuous days of British industry.

About this time several attempts were being made to improve the primitive machinery then used to produce textile goods, and Arkwright through his friend Kay the clockmaker soon became interested in spinning machinery. Even then cotton was king in Lancashire and in almost every cottage either spinning or weaving was engaged in. About 1764 James Hargreaves had invented his

ARKWRIGHT'S CARDING MACHINE



Although radical changes have been made in textile machinery since Arkwright's time carding is still done substantially on the lines laid down by him.



"spinning jenny," by which twenty or thirty threads could be spun by the labour which had previously been necessary to produce one thread. But the thread produced by this jenny was so soft that it could only be used as the weft in weaving, harder hand-spun thread being necessary for the warp.

So Arkwright set to work to invent a spinning machine which could produce thread of any desired thickness and strength. He abandoned his hair merchant's and barber's business, and set to work making models of spinning machines. Since he was no mechanic himself, he engaged Kay to carry out his instructions, and the two men worked early and

A BENEFACTOR OF INDUSTRY



Sir Richard Arkwright was one of the earliest and most important of those who were instrumental in substituting machinery for hand labour in textile manufactures.

late to perfect Arkwright's new idea. Their finances became exhausted, and Arkwright applied to a Mr. Atherton, of Warrington, for pecuniary assistance, but this gentleman, who was unimpressed by his visitor's extreme bluntness and obvious lack of education, refused to do more than lend a smith and toolmaker, who undertook the making of the heavier parts of the apparatus.

Arkwright and Kay worked ceaselessly, and, though they sometimes had to go hungry, the ex-barber's dogged determination kept them from despair or surrender. Finally, some time in 1768 (even Arkwright was not quite certain when), the "spinning frame" was completed, after, in its inventor's words, "intense and

painful application." Arkwright and Kay took their completed machine to Preston, where it was set up in the parlour of the Free Grammar School, and exhibited in the greatest secrecy to possible patrons.

The Secret Leaks Out

A Mr. Smalley, of Preston, interested himself in the invention, and was just on the point of concluding negotiations to set up a mill, when somehow or other the secret leaked out. The Preston people looked askance at machines, first, because they imagined that they would throw them all out of employment, and, secondly, because they regarded them as inventions of the devil, for in Lancashire a belief in witchcraft lingered on almost to within living memory. Learning of their intention to smash his machine and probably do him bodily injury, Arkwright forthwith removed to Nottingham.

There he set up his first works, but his operations were crippled by lack of capital, and did not prove financially successful. Two stocking manufacturers, named Strutt and Need, came to his rescue, entered into partnership with him, and financed him on a generous scale. The three partners built a new mill at Cromford, in Derbyshire, which was opened in 1771. A water-wheel supplied the power to drive a set of Arkwright's spinning frames, and, established on a proper scale, his invention soon showed how useful and profitable it was.

During these years of difficulty, however, Arkwright's inventive genius had not lain idle. He had improved and added to his machines, and in 1775 he took out a new patent, which not only covered the existing machine, but protected a series of machines for cotton spinning in all its branches.

Attempts to Ruin Arkwright

The immense success of the Cromford mill attracted the attention of all the cotton-spinning world, and the Lancashire manufacturers set to work to ruin Arkwright, for they saw that, if they did not do so, he would very shortly ruin them. They brought an almost obsolete Act of Parliament into action against him; they encouraged his workpeople to desert his mill, and they even arranged for the destruction of his mill. The indomitable Arkwright, however, delighted in a fight of any kind. He made vigorous representations to the Government, as a result of which the absurd Act was repealed in 1774, and the cotton masters saw that they must in future prepare to fight Arkwright on his own ground.

A new campaign was launched against Arkwright's patents. He was accused of stealing other men's inventions, and the validity of his patents were challenged. All the while this

battle raged in the courts, Arkwright's enemies were actually infringing his patents and setting up similar machines in their own mills.

As may be imagined, Arkwright was the last man to take this sort of thing lying down, and he fought his persecutors with great vigour. A long and tiresome legal battle ensued, involving many cases, and at length in February, 1786, a final and decisive judgment was given in Arkwright's favour. In spite of this, his enemies still persevered, and later in the year, owing to legal technicalities, and without a shred of real evidence, his patents were all cancelled.

Nevertheless, this proved a somewhat barren victory for Arkwright's adversaries. During this long period of litigation he had flourished enormously. His business had progressed by leaps and bounds, he had built many new mills, and he had granted permission to other manufacturers to use his invention. Yet the general body of workmen still feared and hated his machinery. On one occasion they completely wrecked his mill at Chorley, while the police and military, bribed and influenced by his rivals, quietly looked on. Arkwright, however, promptly rebuilt the mill, organized his own defence against subsequent attacks, and went on his way unmolested. The Lancashire folk, feeling that it was no good fighting a man like that, gave up the conflict.

Hardships of the Workmen

On the other hand, there was a real basis of grievance on which the "frame-breakers" acted. The new power-driven mills undoubtedly put many of them out of work, lowered their wages, lengthened their hours, and took away their independence. The advent of Arkwright's spinning machinery was largely responsible for that terrible state of affairs which existed in Lancashire during the later part of the eighteenth century. Little children worked twelve and fourteen hours a day, families lived huddled together in wretched houses, and wages were at starvation level.

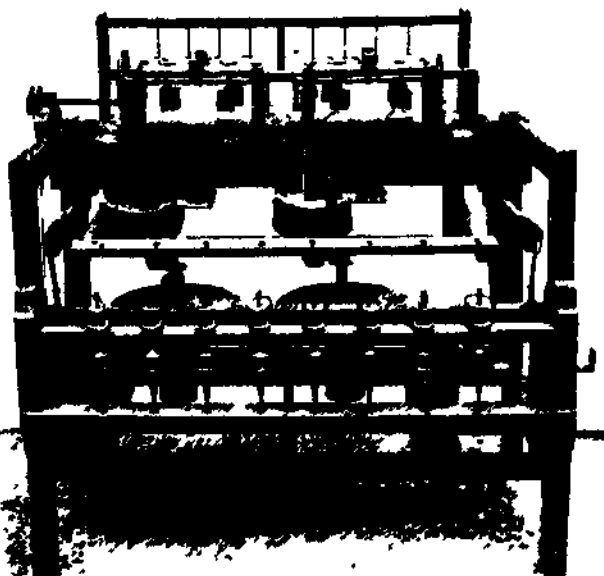
Arkwright's inventions put great riches into the hands of manufacturers, and, although eventually they vastly increased Lancashire's prosperity, for a long while they brought nothing but misery, hardship, and despair to the working classes. Not until that greatest of English philanthropists, Lord Shaftesbury, forced his Factory Acts through Parliament did conditions improve.

Though immensely strong, as he had shown by all his labours and by his prowess as a youth in Preston election riots, Arkwright never

enjoyed even moderately good health. He suffered from asthma and chronic bronchitis, which were aggravated by the effects of undernourishment in his childhood. In 1787 he reaped the rewards of his success by his appointment as high sheriff of Derbyshire. In 1786 he had been knighted. He did not, however, lessen his activities, but continued, with unabated vigour, to build new mills and to improve his machinery.

He died on the 3rd August, 1792, at his works at Cromford, in his sixtieth year. It is idle to pretend that Arkwright was in any way a particularly good or unselfish man. He was greatly gifted, but he used his gifts to satisfy

ARKWRIGHT'S ORIGINAL SPINNING FRAME



Arkwright's spinning machine, first set up in 1768. His first spinning mill was driven by horses, but later he resorted to water power, and hence the frame came to be known as the water frame.

his own ambition. Nevertheless, his inventions have proved of incalculable advantage to his countrymen, and few have benefited them to a greater extent.

James Hargreaves was born on the outskirts of Blackburn, not many miles distant from Arkwright's birthplace, about the year 1745. He came of a family of poor weavers, who worked at looms in their own cottages. He was absolutely without education, and had to discover everything for himself by the laborious and difficult method of trial and error. Put to spinning and weaving directly he was old enough to understand what he had to do, he spent many years of hard work either at home or in a Blackburn mill, owned by Sir Robert Peel's grandfather.



One day, while Hargreaves was waiting for his wife to finish spinning a bobbin of worst thread on her spinning wheel, he accidentally knocked her primitive wheel over. As it lay in a horizontal position on the floor, the wheel continued to revolve, and suddenly, as he watched it the idea struck him that, by means of a horizontal wheel and a number of upright bobbins placed side by side, it might be possible to spin a number of threads simultaneously. Accordingly, he set to work to devise such a machine, with no other idea than that it might save him trouble and increase his earnings.

Produces the Spinning Jenny

After many months of tedious trials and failures, which completely occupied his scanty leisure, Hargreaves succeeded in producing a machine which would spin eight or a dozen threads at once. This he named the "spinning jenny," and, although it was extremely clumsy and rough, the machine answered its purpose very well. Vastly encouraged by this success, he proceeded to build one or two similar "jennies" for his friends and neighbours, but this proved to be a disastrous step.

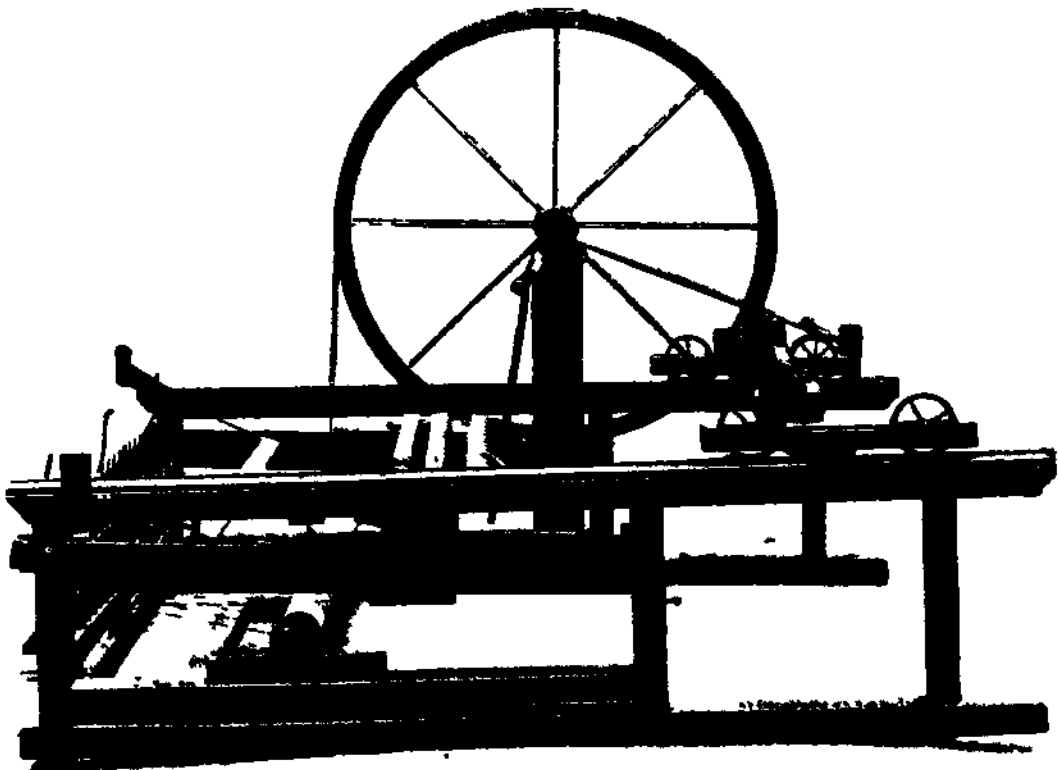
Everyone in Blackburn came to know that Hargreaves was meddling with machinery. The countryside, it was declared, would be depopulated and driven to starvation by such a diabolical piece of ingenuity. A large number of cotton operatives, therefore, solemnly met together, and resolved to march upon the luckless inventor's little cottage.

Making Short Work of the Jenny

Fortunately Hargreaves was not at home, but his jenny was there, and the operatives smashed it to pieces. They then proceeded to Peel's mill, where Hargreaves was at work, and as thoroughly demolished that establishment.

Hargreaves, realizing the likelihood of further trouble, removed to Nottingham, where he became acquainted with one Thomas James, a carpenter. James had been a thrifty man, and had put by a small sum of money against old age or misfortune. He was a man of imagination, and, soon perceiving the possibilities of his new friend's invention, he resolved to risk all his savings on his faith in Hargreaves. The two men entered into partnership, set up jennies, and started business.

THE INGENIOUS SPINNING JENNY INVENTED BY JAMES HARGREAVES



The invention of the spinning jenny is attributed to an accident. His wife's spinning wheel having been knocked over, the thought suddenly came into Hargreaves' mind that, as the spindles went on turning round in an upright position, several threads might be spun at once if a number of spindles were placed upright side by side.

For biographies not included in the Groups see detailed Index



Their business prospered, and in 1770 the jenny was at last protected adequately by a patent. The patent granted was "for a method of making a wheel or engine of an entirely new construction . . . in order for spinning, drawing, and twisting of cotton, and to be managed by one person only, and that the wheel or engine will spin . . . sixteen or more threads at one time. . . ."

As soon as Hargreaves and James began to develop their business, the old story of Arkwright and the jealousy of the cotton masters was repeated. Lancashire mill-owners began coolly to pirate the invention for their own benefit, and the machine, which the good men of Blackburn had smashed as a menace and a destroyer of their livelihoods, began to give the whole cotton industry an enormous impetus.

Not unnaturally, however, Hargreaves took action against the mill-owners for infringement of his patent. The Blackburn mill-owners promptly formed an association against him, bringing a number of eminent counsel, and Hargreave's solitary barrister, when he learned how many and how rich his opponents were, threw up his brief. Thus Hargreaves, like many another impecunious inventive genius, was quietly and effectively deprived of the fruits of his invention.

Nevertheless, he and his partner continued to prosper in a small way, and he appears to have been worth some six or seven thousand pounds when he died at Nottingham, worn out with worry and disappointment, on the 22nd April, 1778. Sir Richard

Arkwright wrote that Hargreaves "died in obscurity and great distress," but this does not seem to have been the case, although some of his children subsequently fell into

extreme poverty, a fund being organized for their relief.

The Blackburn mill-owners, however, though they derived enormous wealth from his invention, refused almost to a man to come to the aid of his children when they were in need.

THE SAVIOUR OF AN INDUSTRY



Jacquard was a native of Lyons, and was the inventor of the pattern-weaving loom, which saved the silk-weaving industry of his native land.

Edmund Cartwright, who also helped in the development of the textile industry, was born at Marnham, in Nottinghamshire, on the 24th April, 1743. He came of a family in easy circumstances. His elder brother, Major John Cartwright, was one of the earliest and noblest of Parliamentary reformers, and a man who did not shrink from declaring publicly that he considered that George III's and Lord North's war against the American colonists was an iniquitous mistake.

Edmund Cartwright was educated at Wakefield Grammar School, from which he proceeded to University College, Oxford, in 1761. During the following year he won a demyship (scholarship) at Magdalen College. In 1764 he was elected to a fellowship at Magdalen, and his friends predicted a brilliant academic career for him.

He remained in residence at Magdalen until 1779, enjoying the not too arduous course of university life, as it then was. He published two highly popular books of verse, "Armine and Elvira" and "The Prince of Peace." In 1779 he was presented to a college living at Goadby Marwood, in Leicestershire, to which was added a prebend's stall in Lincoln Cathedral. So when the Rev. Edmund Cartwright proceeded to his comfortable rectory, everyone thought he was behaving just as had been anticipated.

It is likely that he would have passed the remainder of his life in comfortable ecclesiastical obscurity, had it not been for an accidental

A CLERGYMAN INVENTOR



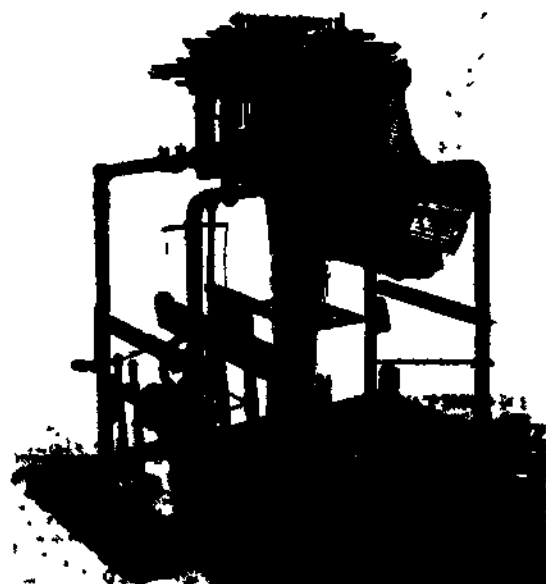
Dr Edmund Cartwright, the country rector who invented the power loom. On being told that a weaving machine was impossible, he went and made one.



encounter with a Manchester man in 1784. This man happened to mention that Arkwright's spinning frames were producing so much yarn that soon there would not be enough men in Lancashire to weave it. "Then why doesn't someone invent a weaving machine?" asked Cartwright. "Impossible!" he was told, "quite impossible!" Cartwright answered that he had seen an ingenious automaton play chess in London, so if a machine could go through the many movements required in that game, another machine could certainly be devised to weave automatically.

Cartwright possessed considerable mechanical ingenuity. He had already amused himself

OLD TYPE OF JACQUARD LOOM



In the early Jacquard looms one weaver could work the whole machine. The cylinder was controlled with one foot, the selecting parts with the other, leaving both hands free.

with such toys as a clockwork paddle-boat of his own design, and he determined to put his talents to better use, and invent an automatic loom. Without ever having seen a hand loom at work, he produced his first machine, which proved far too powerful and heavy. Undeterred, he watched the weavers at their work, and then improved his designs and built his second loom. In 1787 he took out a patent for this machine, which proved efficient in every way, and produced cloth equal to the ordinary hand-woven product.

The manufacturers, however, would have nothing to do with Cartwright. They disliked the idea of a mechanical loom, simply because they had never seen one before. So Cartwright set up a mill of his own at Don-

caster, where he installed a steam-engine to supply the necessary power. His immediate success interested a large Manchester firm, which promptly ordered 400 looms from him. Unfortunately, no sooner were these set up, than the mill was burnt to the ground. It was suspected that machine-breakers deliberately set fire to the place, for the "no machinery" cry was then at its height.

Forced to Give Up His Mill

Nevertheless, Cartwright struggled on against the intense opposition which seems to have been the inevitable lot of all the pioneer inventors of the textile machinery. Eventually, losses of more than £30,000 forced him to surrender his Doncaster mill to his creditors. This misfortune, however, utterly failed to dishearten Cartwright, and he turned his attention to steam-engines, agricultural implements, and rope-making machinery. At the same time, he devoted himself to pure science, with what success can be gauged from the fact that he was elected a fellow of the Royal Society.

He was soon to discover that his looms were everywhere in use in Lancashire, and that immense profits were being earned by them. His patent had expired in 1804, and so he could not obtain legal redress, but, though the mildest-tempered of men, he for once raised his voice in indignant protest. As a result the Government awarded him a grant of £10,000, upon which he lived comfortably until his death at Hastings on the 30th October, 1823. While this grant was by no means princely, it was obtained through the action of the mill-owners, who, in this instance, appear in a better light than they do over their treatment of the unlucky Hargreaves.

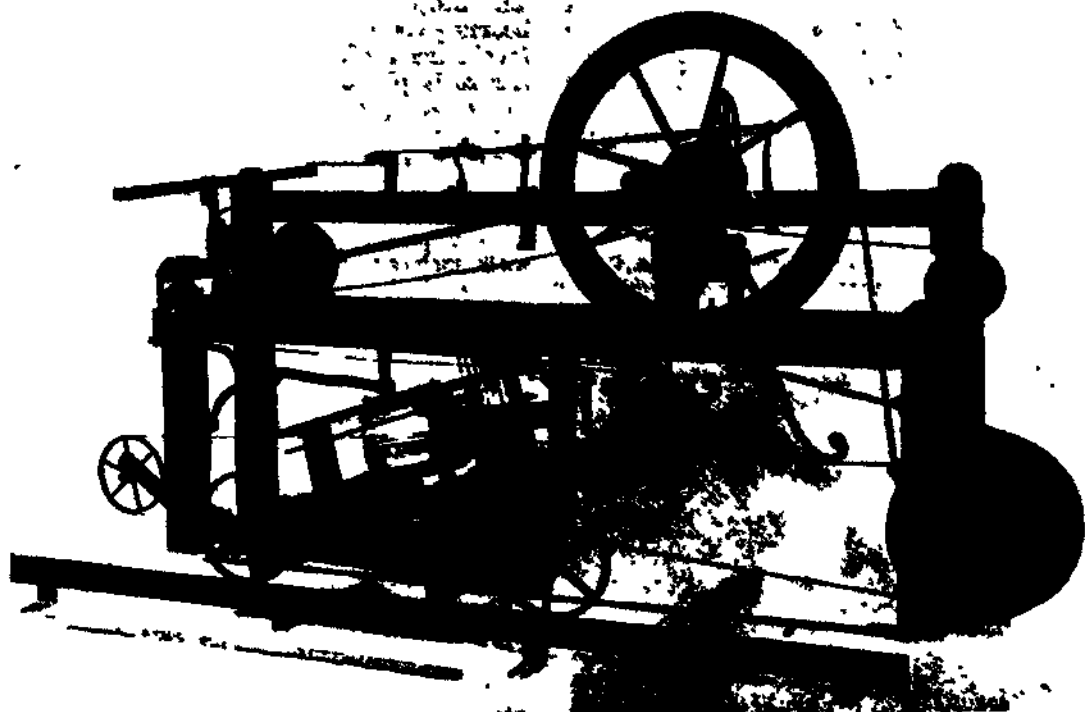
The Inventor of "Hall-i'-th'-Wood"

Yet another who helped to place the textile industry on a firm basis was Samuel Crompton. Born on the 3rd December, 1753, he was the son of a small farmer at Firwood, near Bolton, in Lancashire, who was also caretaker of a gloomy, disused mansion called "Hall-i'-th'-Wood." His father died when he was only five years old, and his mother, though a dour woman, brought up her son excellently, according to her own ideas. He was of an inventive and ingenious disposition, and, as a youth, he taught himself to play the violin, attaining to such proficiency that he was engaged in the orchestra of the Bolton theatre at the munificent salary of eighteenpence per night. During the daytime he spun yarn at home, and the clumsy, inadequate jenny with which he worked caused him to turn his attention to its improvement.

With the modest income earned by fiddling, he bought tools and materials, and started to



THE SPINNING MACHINE THAT HELPED TO MAKE LANCASHIRE PROSPEROUS



At the cost of years of labour and all his hard-earned savings, Crompton completed his mule in 1779. At that time fine muslins were chiefly imported from India, but the yarn that Crompton could produce was delicate enough to make a fabric equal to the Indian muslins. Hence his invention was sometimes called the muslin wheel.

apply his ideas for a new machine. For five years he toiled without sympathy, advice, or help, working away while everyone else was abed. The neighbours decided that he must be a conjurer, on account of his strange labours, and the epithet became fastened to him as a nickname. At last suspicion was aroused that Crompton was inventing a machine, and the inevitable persecution began. Thereupon the young inventor devised an ingenious hiding-place in a ceiling, and, whenever he thought trouble was brewing, he would take his machine to pieces and hide it there.

Success of the "Mule"

At last, when his invention (which he called the "mule," as it was a cross between the machines of Arkwright and Hargreaves) was perfected, Crompton, confident that riches awaited him, married, his wife being an expert spinning hand. He had no money to patent his machine, so operated it at home, earning a comfortable living by the amount of yarn he was thus able to produce. But the very excellences of his yarn gave him away, and spies gathered round his house, bent on discovering what sort of a machine he had hidden there. "I was reduced," he said, "to the cruel necessity of

destroying my machine altogether, or giving it to the public. To destroy it, I could not think of. . . . I gave it to the public."

As usual, the public proved utterly ungrateful. Some £60 was all Crompton ever received. But his mule proved completely successful. It was installed everywhere, and many made fortunes out of it—except its inventor. Until the Government made its £10,000 grant to Cartwright, Crompton struggled on miserably, but this event roused his determination. He went about the country and found that while 311,000 spindles were in use on Arkwright machines, and 156,000 on Hargreaves', more than 4,500,000 were in use on his mules.

Bolted out of Glasgow

During his journeyings he arrived in Glasgow, a city which had greatly profited by his invention. Certain mill-owners thereupon organized a public dinner in his honour. This recognition of his invention, however, proved too much for poor Crompton, who was overcome by it. "I just hid myself," he wrote later, "and then fairly bolted out of the city."

Ultimately the Government granted him the sum of £5,000, a miserable reward for the man who put the finishing touches to the work of



Arkwright and Hargreaves, and who ensured the future prosperity of Lancashire. Crompton had very little business ability, and he had soon lost the £5,000 in the cotton trade. The Bolton manufacturers, however, bought him a small annuity, on which he lived until his death on the 26th June, 1827.

Joseph Marie Jacquard, inventor of the pattern-weaving loom, was born at Lyons, the headquarters of the great French silk industry, on the 7th July, 1752. His parents were miserably poor silk weavers, and an empty stomach was a more usual occurrence in their household than a dinner. It is not surprising,

INVENTOR OF THE SPINNING MULE



Samuel Crompton was no business man, and, in spite of the tremendous success of the mule, he depended at the close of his life on an annuity subscribed by his friends.

therefore, that Jacquard refused to adopt his parents' calling, and worked variously as a bookbinder, a hat-blocker, and a type-founder.

In 1802 the English Society of Arts offered a prize for a lace-making machine, which should fulfil certain conditions, and Jacquard happened to see a translation of the announcement. Having been brought up among looms, he was, of course, conversant with their design, and he set about designing one in his spare time to weave lace or any sort of patterned material. He was not favourably impressed with the result of his efforts, however, and did not submit his design to the Society of Arts.

A friend of Jacquard's, however, borrowed his model, and showed it to the prefect, who, struck by its ingenuity, sent it to Paris. Two or three weeks later Jacquard was summoned to Paris. Trembling and shy, he was received by Napoleon, then first consul, and Count Carnot, Bonaparte's "organizer of victory."

'Are you the man who pretends to do what God Almighty cannot do—tie a knot in a stretched string?' asked Carnot, in his great booming voice. "I can only do what God has taught me to do," stammered Jacquard, and this reply pleased Napoleon, who then began to question poor Jacquard kindly.

This interview led to another, and finally Jacquard convinced both Bonaparte and Carnot that his loom could do all he claimed for it—it *could* weave any pattern which was laid out on the pattern card beforehand. Delighted with such an invention, Napoleon promptly appointed Jacquard to the Conservatoire des Arts et Métiers, where he was supplied with the funds to proceed with improvements to his loom. He had the supervision of pattern-weaving all over France, and he began to instal his looms in the mills.

Model Destroyed by a Mob

Jacquard, however, no less than the English inventors, had to contend with the "no machinery" opposition. He took a model of his loom to his native town and exhibited it to a gathering of city fathers. Unanimously they decided that such a pestilential thing should be publicly destroyed, which sentence was carried out by a mob of silk weavers. Jacquard was denounced as a danger to mankind, and on three occasions attempts were made upon his life. He brought his invention to England, where the anti-machinery feeling was on the wane. It was immediately taken up, and soon enabled our manufacturers to undersell their French competitors.

The French weavers, therefore, were now forced to adopt the hated loom in self-defence, and they appealed to Jacquard to help them.

Most men who had met with this treatment would have refused, but Jacquard, who had a forgiving and kindly nature, agreed to forget the past. He started manufacturing and improving his looms, teaching operatives how to use them—in a word, he saved the silk-weaving industry of France.

Content to Stay in Lyons

The municipality of Lyons made an annual grant to him, sufficient for his modest needs, and he settled down to superintend an industry which began to flourish as the result of his invention. Many tempting offers were made to Jacquard to leave Lyons, but he always answered that he was perfectly happy where he was. His was a genuinely altruistic nature, and he found his reward, not in wealth or power, but in contemplating the industry which flourished by virtue of his loom, the loom which had released the poor folk of Lyons from the penury in which he himself had passed his boyhood. He died on the 7th August, 1834.

The TRIUMPHS of AUSTRALIAN EXPLORATION



Edward John Eyre

The Great Daring of Edward Eyre and Robert Burke who Tramped Across Hundreds of Miles of Trackless Wastes where the Dread Spectris of Starvation and Thirst Lay in Wait for Them at Every Step, and How their Daimtless Courage and Determination Enabled the Mysteries Enshrouding the Interior of the Australian Continent to be Disclosed to the World



Robert O'Hara Burke

A CERTAIN day of July, 1841—the 7th to be exact—was a day destined long to be remembered by the inhabitants of Albany. Situated on King George's Sound, in Western Australia, Albany was a picturesque little port, but, like most places, it lost its attractiveness and beauty in wet weather, and that day it was miserably wet.

For hours a pitiless storm had been raging, and the streets, where usually crowds of natives and a sprinkling of fair skinned residents were to be seen, were deserted. Even the hardy Australian aborigine did not venture beyond the doorway of his modest home, but stood glumly watching the narrow streets being turned into chains of rain splashed pools.

A Sudden Disturbance

For some time the monotonous swish of the rain was the only sound to disturb the stillness of the air, but suddenly a shrill cry rang out, to be repeated after a short interval. At once the streets assumed an animated appearance, and crowds swarmed around the mud bespattered, breathless native who had startled the neighbourhood with his cries. He had the look of a man who had come unexpectedly across some ghostly apparition. He spoke rapidly, rolled his eyes and gesticulated wildly with his arms, now and then pointing a lean finger in the direction of the hill from whence he had come.

For some moments, his audience stood gaping, lost in wonder at the extraordinary tale he had to tell. Then, pandemonium broke loose. Old men, young men, women, girls and boys with one accord rushed pell-mell along the street and ploughed their way through the mud and rain up the steep slopes that overlooked the town. Not until they neared the crest did

they come to a standstill and cease their incoherent jabbering. A few paces away, limping painfully in their direction, were two figures. One, a native boy, they recognized with difficulty as Wyhe, whose home was in Albany. The other, they guessed, was Edward John Eyre, the renowned English explorer.

More than a year before, Eyre had set out from Adelaide with the intention of exploring the northern interior of Australia. His ambition was frustrated, but, with remarkable daring, he had thereupon resolved to seek a passage between South and Western Australia, across hundreds of miles of unknown, forbidding desert. For months, nothing had been heard of him and his gallant companions, and all hope of their safety had been abandoned. Now, the intrepid leader and his faithful follower had reached their goal to be welcomed as men returning, it seemed, from the grave—a pathetic remnant of that well appointed, happy, healthful band of adventurers who had left Adelaide, full of confidence and hope.

Welcoming the Wanderers

Once they were certain that their eyes were not deceiving them, and that these two ragged creatures, whose thin wasted frames evinced their long continued suffering and hardship, were really Eyre and Wyhe, the joy of the natives knew no bounds. Tears streamed down their faces as one after another they warmly embraced the returned wanderer of their tribe and escorted him in triumph to his home. "Affection's strongest ties," said Eyre, "could not have produced a more affecting and melting scene."

After parting from the now radiantly happy Wyhe, Eyre at once made for the European

quarter of the town, where he received a rapturous welcome. In the last stages of exhaustion and fatigue, and crippled with rheumatism as he was, his triumph had been dearly purchased, but he had few regrets. He had crossed over a thousand miles of inhospitable, scorching desert, and had survived to hand on his experiences for the benefit of posterity; he had found a route from Adelaide to King George's Sound; and, what was more important, perhaps, than either of these, he had proved that still there were Englishmen willing to face terrible hardships—death, if need be—in the sacred cause of science.

How Australia was Discovered

Few stories throw up in such bold relief the indomitable spirit of man, as that of the exploration of Australia, the last of the great continents to be discovered by Europeans. Its existence was first reported to the Portuguese in the middle of the sixteenth century, and in 1606, Luis de Torres, a Spaniard, sailed along the coast and gave his name to Torres Strait between Queensland and New Guinea.

Less than forty years later, a Dutchman, named Abel Tasman, discovered an island which he called Van Dieman's Land, and which we now know as Tasmania. The first Englishman to set foot in Australia was William Dampier, a freebooter, who landed in 1688. Very little, however, was known about the country until 1770, when Captain Cook explored the eastern coast and made a landing in Botany Bay, where the magnificent city of Sydney now stands.

For years the interior of the continent was wrapped in mystery. Its exploration presented a problem which appeared insoluble. Brave men who ventured inland for a mere hundred miles or so, returned baffled and usually exhausted. North, south, east, and west, they had the same tale to tell. Rugged wilderness and scorching plains without any sign of vegetation seemed to extend right across the continent, forming an insuperable barrier.

Host of Intrepid Explorers

Gradually the undimayed will of man prevailed, and the arid Australian desert, like the fever-stricken swamps of Africa, the tropical plains of Abyssinia, and the icy regions of the Poles, gave up its secret. Leichardt, Gregory, Sturt, Oxley, Stuart, and later, Warburton and Giles—these are names written large in the history of Australian exploration. But the two heroes whose exploits most completely captured the public imagination were Eyre and Burke, the former because of his amazing personal daring, and the latter because of the tragic sequence of misfortunes which culminated in his death and clothed his achievement with such harrowing pathos.

The son of a Yorkshire vicar, Edward John Eyre spent his early years at Hornsea, some sixteen miles north-east of Hull, where he was born on the 5th August, 1815. Yearning for a life of adventure, he determined on a military career, but failing to obtain a commission in the English army, he emigrated, in 1833, to Australia and became a "squatter" on the Lower Murray River. It was not long before he undertook his first travels in Australia, for, now and then, it fell to his lot to drive great herds of cattle to some distant coastal town.

These journeys, which took him sometimes across a comparatively unknown wilderness, stimulated the desire for more daring travels, and, in 1839, during one of his many expeditions, he discovered Lake Torrens. His outstanding ability soon earned him distinction, and before he had reached the age of twenty-five he was appointed a magistrate. Eyre's ambition, however, extended beyond administrative posts, and when he heard that an expedition was being fitted with a view to exploring the northern interior of Australia, he at once applied for the leadership, and in spite of his youth and little experience, his request was granted.

The Expedition Sets Out

A public subscription list was opened to finance the expedition, but nearly half the cost was cheerfully borne by Eyre himself. In June, 1840, within a few weeks of his twenty-fifth birthday, he set out from Adelaide on his historic overland journey, accompanied by Edward Scott, his "young, active, and cheerful" assistant, four other white men, two native boys, and numerous horses and sheep. Before long the grassy plains, hills, and watercourses gave way to wide stretches of stony ground, and the great problem of providing water for themselves, and food for the horses and sheep, became a constant worry.

Save for an occasional native, who generally took to his heels on seeing the white men, the country seemed to be uninhabited, and in his daily search for water, Eyre had to rely mainly on his intuition and good fortune. When, as it often did, his search proved ineffectual, the whole party had to retrace its steps to the last watering-place. With a less determined man to lead them, the expedition would soon have broken up in face of such oft-repeated disappointments and hardships.

Sends for Fresh Supplies

Eyre's troubles and difficulties increased as he went on, and after a while he had to send Scott back to Adelaide for fresh supplies. It was his custom to pitch his camp near a spot where there was water for themselves and food for the cattle, and then to go off with a native to find a suitable site for their next stop. Sometimes he had to

SETTING OUT FOR THE UNKNOWN INTERIOR OF AUSTRALIA



When Eyre heard that an expedition was to be fitted out to explore the northern interior of Australia, he forwarded an application for the leadership. Although not quite twenty-five years of age, his request was granted, and in June, 1840, he set out on his great adventure, cheered by a large concourse of well-wishers.

travel for days before discovering what he wanted, and, on one occasion, when his search failed, he and his companions found themselves miles away from their depot and without a particle of food or drop of water to sustain them. Only one course lay open to them, and that was to return to camp as quickly as their exhausted horses could carry them.

Through a Dense Thicket

All went well until late one night they discovered their path took them through a dense "brush." To delay their journey until the morning would very likely have been fatal, for their horses, like themselves, were racked with a terrible thirst and were in great danger of collapsing. There was no alternative, therefore, but to risk being blinded by projecting branches, and with a prayer on their lips they plunged into the thicket. Fortunately, they escaped with minor injuries and rejoined their anxious comrades in safety.

The impossibility of penetrating any distance inland gradually forced Eyre to change his plans. While it seemed at all feasible, he persevered with the idea of exploring the interior, and he postponed abandoning the project for as long as he dared. The decision to strike out in a fresh direction was finally forced on him following a doleful misunderstanding with some natives which placed the whole of the party in extreme peril. Meeting these natives one day, he tried to

discover from them where he could replenish his supply of water. The black men immediately offered to accompany him as guides, and Eyre gratefully accepted.

In the belief that he had come to an end of his difficulties, at least for a time, he shared the last precious drops of water between his men and horses, but, to his horror, the following day the natives took them to the sea, evidently under the impression that they had fulfilled their mission. The melancholy truth was slowly borne upon the Englishmen. There had been a mutual misunderstanding. Coming unexpectedly across white men in the desert the natives naturally had concluded that they had come from the sea and had lost their way, and the black men were as disappointed at not seeing a ship as the Englishmen were at not finding any water to slake their thirst.

Expedition Broken Up

Luckily, before the end of the day, Eyre stumbled on a spring, but he determined that as there was now no hope of his fulfilling his original plans he could not subject his party to further dangers. The expedition was therefore broken up, and everyone, with the exception of Eyre, John Baxter (his overseer), and the three natives—Wylie had joined them since they started—returned to Adelaide. Eyre was grieved to part with Scott, but his keen sense of duty left him no alternative.

The opportunity had now arrived for Eyre to prove the possibility of an overland route between South and Western Australia. He knew that the chances of success were small, and before asking Baxter to share the trials of such a perilous undertaking he took him completely into his confidence. The loyalty of the overseer, however, did not waver. "There were still 850 miles of an unknown country to be traversed and explored," Eyre wrote, "the journey before us would of necessity be a long and harassing one—one of unceasing toil, privation and anxiety." Yet he was firmly determined "never to return unsuccessful, but either to accomplish the object in view, or perish in the attempt."

AUSTRALIAN ABORIGINAL FAMILY



Father, mother, and child, representing the type of natives with whom Eyre came in contact on his remarkable journey across the continent of Australia.

The scarcity of water was the greatest hazard from the very first, and, before they had been travelling for a fortnight, all the party were suffering intensely. Severe sandstorms and the torment of biting flies added to the terrors of a parching thirst. More than once Eyre was tempted to leave the sand-hills, but they were "condemned to live among them for the sake of procuring water." At one stage they travelled 150 miles without finding a pool or well to assuage their thirst, and at times their strength was so reduced that they fell down in a state of complete exhaustion.

No less distressing to Eyre were the sufferings of the horses. Once they came across a little pool, but the animals' need was greater than theirs, and they were compelled to look on while

their four-footed friends drained the puddle to dryness. "We had been four whole days and nights without a drop of water for our horses," wrote Eyre at another stage, "and almost without food also, for parched as they were they could not feed upon the dry and withered grass we found."

Soon so critical did their position become that Eyre was reduced to the most extraordinary means of obtaining the precious water that was to them life itself. Once when they had come to the end of their resources, he tore up the roots of a gum-tree and squeezed the moisture from these. For this piece of ingenuity he was indebted to the native boys. Later on he was reduced to collecting with a sponge and bunches of dried grass the early morning dew that appeared on the bushes.

Baxter Shot by Natives

But when he had travelled a little over a third of the distance Eyre was beset with even greater perils. One night, two of the natives, fearing that they were being led to their doom, seized a rifle and killed Baxter, afterwards escaping with the guns and as much food as they could carry. It was a night of horror for Eyre, and dawn brought with it the realization that he was in the midst of the desert with only a native boy as a companion.

With 600 miles still separating them from King George's Sound, they had between them only a few pounds of flour, four gallons of water, and a little tea and sugar. In addition, there was the danger that they would be attacked by the two murderers as soon as the latter had got through the provisions they had stolen. As it happened, the two natives made a furtive appearance that same day; their object, however, was not murder, but to induce Wylie to leave Eyre and go with them. The attempt failed, and the murderers then made off.

Struggling on to His Goal

Although despondent at the ill-fortune that had overtaken the expedition, Eyre pushed on to his goal with undiminished determination. Day after day he and Wylie struggled on under a scorching sun, often with little to eat and nothing at all to moisten their parched throats. For weeks, all they had to subsist on was a little flour with an occasional meal of horse-flesh, but, whenever they could, they varied the menu by shooting the various birds, hunting crabs, spearing a fish, or by killing a kangaroo or an opossum. A good part of the journey had been covered when, to Eyre's great relief and joy, he sighted a French whaling vessel. The captain proved himself a friend in need, and with his immediate wants supplied, Eyre started on the last stage of his travels with renewed determination.

THE FIRST WHITE MAN TO CROSS AUSTRALIA FROM SOUTH TO NORTH



Robert Burke and William Wills lost in the desert. Burke was the leader of an expedition which left Melbourne in August, 1860, to discover a route to the north. Accompanied by Wills, King, and Gray, he accomplished his object, but on the return journey they were overcome by starvation, and only King survived.

Many more weeks of hardship and suffering were experienced, however, before a cry of joy from the lips of Wylie announced that they were in sight of the mountains that lay behind King George's Sound. Eyre and his faithful companion had by then strained the powers of human endurance to the breaking point, but the knowledge that they had almost reached the end of their journey imbued them with sufficient strength to carry them over the last few miles, and, on that memorable 7th July, 1841, to which reference has already been made, they crawled into Albany. As an example of endurance, grit, and resolution, displayed under the most distressing circumstances, this journey of Eyre's has seldom, if ever, been equalled.

An Account of His Travels

In 1845, he published an account of his travels under the title of "Discoveries in Central Australia," and this book at once sealed his fame as an explorer. A year later he was made lieutenant-governor of New Zealand, afterwards going to the West Indies to be appointed governor of St. Vincent, Antigua, and Jamaica. After holding the latter post for three years, he was accused of cruelty in suppressing a negro rebellion and was recalled to England to stand his trial. Eyre, however, was not lacking in staunch friends, and with Carlyle and Kingsley,

among others, rallying to his side, he was acquitted and granted a pension. After a long and peaceful retirement, he died on the 30th November, 1901.

His glorious example could not fail to be inspiring, and shortly before he became governor of Jamaica, an Irishman of his own stamp set out from Melbourne determined to draw aside the veil of mystery that still hung over Central Australia. He was Robert O'Hara Burke, a native of St. Cleram in county Galway.

Joins the Austrian Army

Born in 1820, Burke came from a good Irish family, and after taking a course of military studies as a cadet at Woolwich Academy he went over to Belgium to complete his education. In 1840, he joined the Austrian army, and quickly earned promotion to lieutenant.

At the age of twenty-eight he returned to his native country and secured an appointment in the Irish Constabulary, where he won many friends. Indeed, so tremendously popular did he become that, when he left his post in 1853 to emigrate, a large number of his colleagues also resigned and followed him out to Australia, so that they might still continue to serve under him.

Another and still more striking proof of the affection with which he was regarded was

turned by his old nurse. This plucky woman, Ellen Doherty, who had watched young Burke grow up from the cradle, put by every penny she could save from her hard-earned wages until she had accumulated enough money to pay for her passage to Australia. Then, at the age of sixty-five, she sailed to the Antipodes to see her "dear Master Robert" once more before she died. Pathetically enough, her sacrifice was in vain, for Burke had left on his ill-fated journey before she reached Melbourne.

Burke's career strangely resembled Eyre's in one or two respects. Army life made a mutual appeal to them in early manhood, and after reaching Australia they were both appointed

ANIMALS DISCOVERED BY EYRE



Eyre discovered a number of new Australian animals, among them being the *Rhinolophus aurantius* and the *Cystignathus dorsalis*. The former is a species of bat, commonly called the Orange Horseshoe Bat.

magistrates. Prior to his appointment, Burke saw service in the Victorian capital and elsewhere, in the police force. When the Crimean War broke out, he obtained long leave of absence and hurried home, only to discover he was too late to go on active service.

The chance of leading a life of stirring adventure was not long denied him, however, for on his return to Australia, he was given the command of a Victorian exploring expedition that was being equipped with the object of making an entire crossing of the continent from south to north. This appointment was a great tribute to Burke's versatile ability; there were others whose wider experience entitled them to prior consideration, but Burke was a man who inspired confidence, and when he volunteered

for the post, the Government had no hesitation in accepting his offer. With characteristic thoroughness the young Irishman immediately trained and studied hard in order to fit himself for his responsibilities, and when, on the 20th August, 1860, he left Melbourne at the head of the expedition, he had ample cause for optimism.

So far, everything promised well, but soon, all too soon, he was to be confronted with difficulties and disasters of appalling magnitude—misfortunes that even his doggedness of spirit, his iron will and pluck, his amazing fortitude, were powerless to overcome. Mercifully, he knew not what the future held.

Burke was not altogether fortunate in his choice of companions. Of the eleven Europeans who, with himself, a sepoy, and two natives, made up the party—two at least suffered from irresolution and a lack of self-discipline, and, as it happened, these failings were to have fatal consequences. The first blow came when Landells, the second-in-command, refused to acknowledge Burke's leadership and resigned. Against these misfortunes, however, the Irishman could set his wonderful luck in having such an able and loyal colleague as William John Wills to take Landells' place. Wills, who had achieved much distinction in science and medicine, scarcely left Burke's side throughout the expedition, and his name will always be associated with that of his leader in the great exploit which conferred so much honour upon each of them.

The Party Divides

Before he had been travelling many days Burke decided that he would have to divide the expedition into two parts. The advance party, with himself at the head, pushed on with all possible speed to Cooper's Creek, where he intended setting up his main depot. The others were left in charge of the bulk of the stores, with instructions to follow on as quickly as they could. The advance party reached Cooper's Creek on the 11th November, and Burke lost no time in making preparations for the arduous journey that lay in front of him.

Final orders were given that an assistant named Brahe and the rest of the party were to remain at the depot until he returned; then, secure as he thought, in the knowledge that he had provided against all mishap, Burke set off for the north coast with the rest of the exploring party, consisting of Wills, King, and Gray. They took with them six camels, specially imported from India, and one horse.

At the first, all went well. The natural

WELCOMING THE PIONEER EXPLORERS OF THE AUSTRALIAN INTERIOR



After a journey of hundreds of miles across the trackless and inhospitable desert of Australia during which they had experienced almost insuperable hardships, Eyre and his native companion, Wylie, arrived at Albany. They had left Adelaide more than a year earlier, and all hope of their safety had long since been abandoned.

water supplies, if not plentiful, were sufficient for their needs, and the early stages of their journey took them through "green and luxuriant country." Wild geese, pelicans, parrots of gorgeous plumage, and red-breasted cockatoos were encountered on the daily march, while the huge ant-hills, rising often to a height of four feet, and the abundance of white gum trees could not fail to attract their attention and excite their interest. Only very rarely did they come across a native, and then he was so scared at finding his domain invaded by white strangers that he made off as fast as his legs could carry him.

Not for long did the conditions remain favourable. Heavy rains—how Eyre would have blessed them—made the ground unsuitable for the camels, and Burke was at length compelled to go on ahead with Wills. On the 9th February, 1861, they reached the coast, having thus made a complete crossing of the continent.

A Grim Fight for Life

Overjoyed at the great success of their mission, they hurriedly rejoined their comrades and started on the long trek home. Up to that moment, Burke had had no reason to feel apprehensive as to the future, but now the fates turned against him, and he found himself engaged in a grim struggle for life—a struggle that was to continue for four months.

Shortage of provisions made it imperative that they should return to Cooper's Creek with

all possible haste, but the incessant rains made travelling so exceedingly difficult that their rate of progress was often limited to four miles a day. Precious hours were lost in extricating the camels from morasses into which they all too frequently stumbled, and, before long, the men were reduced to starvation rations.

Much exhausted by their continual privations and weakened by lack of food, their condition became pitiable in the extreme. Death, at length, released Gray from his sufferings, but the others struggled on, wondering as day succeeded day whether it would be their last on earth.

Subsisting on Horse-flesh

"Shot a pheasant, and much disappointed at finding him all feathers and claws," ran one entry in Wills's diary. "Much disappointed!" How tragic are these words, but how inadequately they must have expressed his real feelings. A passing incident in the lives of those gallant men, but those thirteen words suffice to conjure up in the reader's mind all the elements of a real life drama. For fifteen days they subsisted on dried horse-flesh, but at last they came in sight of their depot, and with deep thankfulness in their hearts, they staggered over the last few miles, which they fondly hoped would restore them to the safe care of the rest of the expedition.

Alas for their hopes. Cooper's Creek was deserted; not a soul was there to welcome the

returned explorers, or to tend their wants. And never were men in greater need than were Burke and his companions at that moment. "It was as much as one of us could do to crawl to the side of the creek for a billy of water," King related afterwards. The intensity of their disappointment on finding the depot untenanted can better be imagined than described in writing.

After a short while, Wills noticed some words roughly cut out on a tree. "Dig—21st April, 1861," ran the laconic message. Not far below the surface they found a box containing provisions more valuable to them at that moment

EYRE'S FAITHFUL COMPANION



Wylie, the native boy, who was Eyre's faithful companion during his journey across Australia in 1840-41. This expedition proved the practicability of an overland route.

than their weight in gold. For the first time for three weeks they were able to eat until they were satisfied. Then, in a more cheerful vein, they discussed their future movements.

The date on the tree revealed the melancholy fact that they had missed the depot party by a few hours only, for it was on the evening of the 21st April that they had reached Cooper's Creek. But, in their weak state, Burke knew that he and his companions had no chance of overtaking the others. He therefore decided to journey to Mount Hopeless, the nearest civilized spot, which, under normal conditions, he expected they would be able to reach before their supplies ran out.

With only 150 miles to cover, Burke thought he could see the end of his trials, but the grim spectre of tragedy that had stealthily pursued them ever since they left the north coast, now crept nearer and nearer as if anxious not to lose its prey. Another camel, the last but one, was lost in a morass, and with the final stage of the journey more than half completed, the three explorers found themselves stranded in the desert. Worn out with fatigue and hardship, mentally and bodily exhausted, and with scarcely enough food to keep them alive for twenty-four hours, they set up their last camp near a creek.

Diaries and Journals Buried

Realizing that only a miracle could save them, Burke buried his diaries and journals in the sand and left notes in various places, in the forlorn hope that they would be seen by some chance traveller. The appearance of some friendly natives, who gave them fish and cake, revived their hopes for a few days, but these dark-skinned Samaritans disappeared as suddenly as they had come.

"We have but a slight chance of anything but starvation, unless we can get hold of some blacks," Wills wrote on the 24th June. Growing weaker every hour, Burke and Wills were soon too ill to move. The only food that King could find was "nardoo," the seed used by the natives in making bread, and even the task of pounding this proved too much for them in the end.

On the 29th June, Burke and King left the camp to search for the natives. Wills was sinking fast, and it was their last chance of saving him. "I may live four or five days," he had written the previous day. Heroic, almost cheerful, to the last, without one regret or grumble, he met his death bravely two or three days afterwards.

Burke's Pledge Redeemed

Meanwhile, Brahe, in charge of the depot, had returned to Melbourne and made his report. Worried by hostile natives and oppressed by sickness, he had remained at Cooper's Creek as long as possible, but, thinking that Burke must have returned by another route, he had left the depot on the 21st April. A relief party was immediately dispatched, and, on the 15th September they found King, "wasted to a shadow," in the care of natives. Robert Burke had died on the 30th June. He had pledged himself "to strain every nerve to bring the expedition to a successful issue," and in redeeming that pledge he had given, willingly and uncomplainingly, his life.

[See "Journals of Expeditions of Discovery into Central Australia," by Edward John Eyre (two vols. 1845); "Burke and the Australian Exploring Expedition of 1860," by Andrew Jackson (1862); and "A Successful Exploration through Australia," by William Wills (1863).]

The BIG GUN BUILDERS of ESSEN

An Armament Firm Which from Small Beginnings Rose to Control the Greatest Plant for Making Death-dealing Instruments that the World has Ever Seen

"MAY this memorial encourage others who are in distress, may it strengthen their respect for humble homes, and their sympathy with the great sorrows which often dwell therein."

With these words, Alfred Krupp, the "Cannon King," concluded his written instructions that the little house where his father had lived, toiled, and died should remain for as long as possible untouched on its original site in the centre of the Krupp factory at Essen.

There it stands today, a tiny, old-world cottage surrounded by a network of railway lines and a litter of iron debris, dwarfed by the giant buildings and tall chimneys around it, and yet memorable and significant because it was the starting-point of the greatest establishment for the manufacture of death-dealing instruments that the world has ever seen.

Here, on the 26th April, 1812, Alfred Krupp was born, and here also, when he was only fourteen years old, he learned from his dying father the great secret that was to make the name of Krupp a synonym for world-power, so that the war-lords of all nations

mentioned it with awe and with bated breath.

In a little attic, behind gabled windows, Alfred Krupp passed many a sleepless night, pacing the floor and racking his young brain to think of means to carry out his father's unfulfilled ambition. Perhaps no boy of his age has ever been faced with such a double responsibility. There was his widowed mother to support, and there was the knowledge that he alone in the whole of Germany understood how to manufacture cast steel, and that he had pledged himself to continue his father's work.

Unhappily, it was not possible to carry out both these duties at once, for the factory was in an almost bankrupt condition, and to carry

on the expensive steel-production processes meant taking too great a risk. It was as a result of risking too much in pursuit of his ambitions that Alfred's father died young, leaving little money and the vague outline of a magnificent dream.

Friedrich Krupp's experiments, in fact, had ruined his health and exhausted his resources. Born in 1787, he purchased his first iron smelting forge when he was twenty-three years old.

But he soon recognized that the age of steel was at hand, and, although there was still a great demand for iron products, he deliberately neglected the profitable side of his business and experimented in the new undertaking, which he knew would take years to develop. He saw a fortune in steel, but, although he mastered the means, he did not live to enjoy the end.

For years the eager artificer struggled to discover that process, already known and zealously guarded in England, which would enable Germany to compete successfully with the steel products of Sheffield. He did not find out that process, but he invented another. Friedrich Krupp was the second inventor of cast steel,

his method of production being different from that of Huntsman, the Sheffield watch-maker, and other English inventors.

As early as 1815 Krupp had begun to make small steel articles, and three years later he built a new factory, consisting of eight furnaces capable of producing daily two castings of ingots weighing 25 lb. His products were declared by experts to be equal in quality to the best English steel. But he was still hampered by lack of knowledge and inadequate furnaces. Illness overtook him at the moment when success seemed almost within sight. After imparting to his son his great secret for the casting of steel on a large scale, he rapidly

IN THE DAYS OF ITS SMALL BEGINNINGS



A workshop at Krupps, not long after Alfred Krupp had learned from his dying father the secret that was to make the name of Krupp a synonym for world-power.

declined in health, and passed away in 1826 at the early age of thirty-nine.

The boy steel-maker was determined to succeed where his father had failed. He set himself to think of other inventions, which would bring him a quick profit and so enable the more expensive operations to be carried out. The factory was scarcely paying its way, and all thought of more ambitious plans had to be set aside in order to recover the lost ground.

For fifteen years, with his father's secret burning in his brain and with the fear constantly haunting him that others would forestall him, Alfred Krupp struggled on, making experiments much less interesting than the one uppermost in his mind, until at last the invention of a new process for making spoons on a large scale turned the tide. With the profits derived from this lucky discovery he managed to extend the factory and build the plant necessary for steel production.

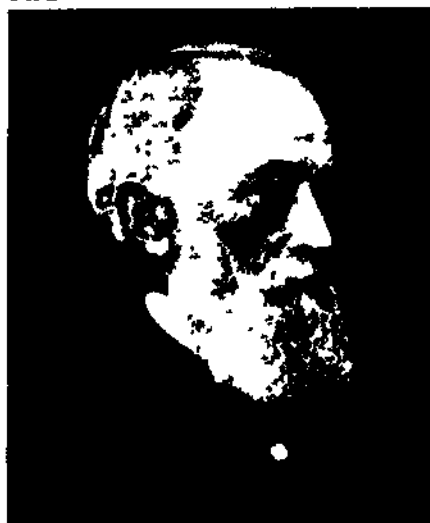
Meanwhile, the British steel industry had developed enormously and held the chief place in the world. At the great Exhibition of 1851 a British firm exhibited an immense solid block of steel, which they confidently regarded as unique. To their astonishment they discovered that they had been outdone by a firm whose name was unknown to them. On the opening day of the exhibition it was seen that another exhibitor, Alfred Krupp, had beaten the record by the production of a block of steel weighing twice as much.

From that day the prosperity of the Krupp steel factory was assured. The dream of Friedrich Krupp had been realized by his indefatigable son.

It would not, however, have remained long in realization but for Alfred Krupp's further insight into the future. Since 1811, when a continental embargo had been placed on the

importation of British cast steel, many other manufacturers had grown into prominence. It was already necessary to find a new field for the application of the new product.

THE GERMAN "CANNON KING"



Alfred Krupp, the man who by his inventive and organizing genius laid the foundation of the great German armament concern at Essen.

For some while Alfred Krupp had been turning his attention to the manufacture of steel cannon. Various attempts to do this had failed, owing to the difficulty of making steel strong enough to resist the enormous pressure of explosive gases. Most guns were still made of bronze or iron or metal alloy. In England William Armstrong had foreseen the day of the steel gun consisting of an outer barrel shrunk on to an inner core, which method would minimize the shock of firing, but he had as yet failed to convince the War Office of the soundness of his plans.

Krupp was developing his favourite idea of a breech-loading gun at the same time as Armstrong was engaged in similar experiments, which were hampered by prejudice and some indecisive results due to minor defects in the mechanism. The German gun-

maker was more fortunate. At the Paris Exhibition of 1855 Krupps exhibited a steel twelve-pounder breech-loading gun which instantly won the approval of the artillery experts and engaged the close interest of all the big powers seeking the best means of armament.

Among the first to order a large number of these guns was Napoleon III. The order was promptly refused. By this time Krupp had realized his power, and he determined that Germany should have the best of his brains and enterprise. It is a fact that, although the Krupp firm have supplied guns to almost every nation, none have ever been made for the French.

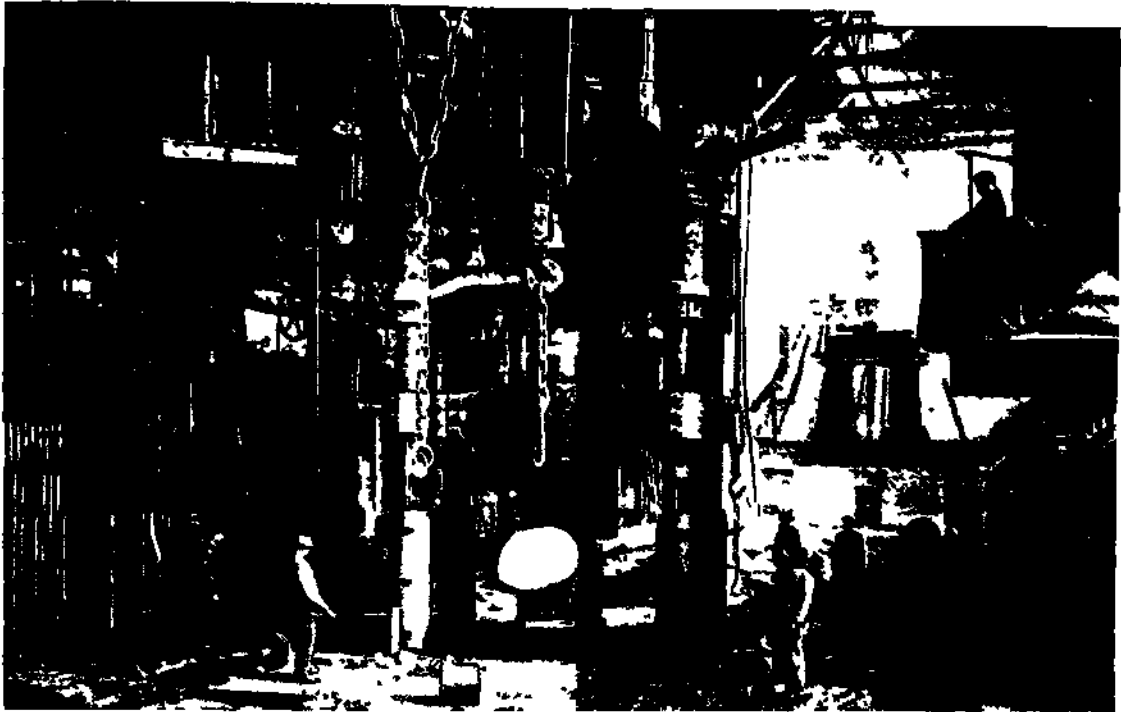
As though realizing the trouble to come, Krupp, in 1867, three years before the first great struggle between the two nations, still refused all orders, although he had won the

HIS SON AND SUCCESSOR



Friedrich Alfred Krupp, head of the firm after Alfred died. Primarily a financier, Friedrich was more a man of ideas than a man of action.

A MONSTER STEAM HAMMER IN ITS HOME AT ESSEN



One of the great steam hammers at Essen. Such monsters are now not an uncommon feature of factories, but Krupps were the first to use them. The earliest example was Alfred Krupp's famous "Fritz," which weighed 50 tons. So delicate was the mechanism that "Fritz" could crack the shell of a walnut without disturbing the kernel.

first prize at the exhibition of that year, with a monster gun, and had been personally decorated by the Empress Eugénie

Krupp's invention of cast steel railway tyres, made without welding, proved enormously successful and enabled him to embark upon further plans for the production of big guns upon a scale hitherto unprecedented. His genius and persistency had thus been amply rewarded, but, although he had realized his father's dream, he did not rest. Some of his schemes for the improvement of the factory plant seemed to those around him the result of insanity, so fantastic were they when compared with existing apparatus

A Gigantic Steam Hammer

There was, for example, Krupp's proposal to erect a gigantic steam hammer for the purpose of forging heavy ingots of steel into cannon. Previously, the limit of weight for a steam hammer had been 10 tons, but this was not powerful enough to carry out Krupp's designs. At a cost of £90,000, and infinite labour and thought, he devised and had erected a steam hammer weighing 50 tons.

"Fritz," as this monster steam hammer was christened, eclipsed all other machines of its kind. When it descended for the first time upon the anvil block, which weighed 185 tons,

the foreman and workmen leapt backwards in horror of the terrific force of the impact.

Yet, so delicate was the mechanism that controlled "Fritz," that it could be made to descend with no more force than was sufficient to crack the shell of a walnut placed on the anvil, leaving the kernel intact.

Making Germany a Naval Power

To-day, there are many such hammers in the steel factories throughout the world, but Krupp was the first to use them, and by their aid he forged the great guns that were to make Germany powerful and arouse in her rulers the consciousness of military strength. "When the Emperor William," wrote a German authority, "decided to devote his chief energies to the task of making Germany a first-class naval power, we may be sure that he had Krupps at the back of his mind"

It has been estimated that enough steel has been produced at Krupp's factory to encircle the world with a continuous railway track. In 1881, during Alfred Krupp's lifetime, the year's output amounted to 260,000 tons, including crucible, open-hearth, and Bessemer steel. All of it was of the very highest quality, the least flaw in an ingot being sufficient to cause its rejection by Krupp's expert overlookers, often at a cost of many thousand

pounds. "In my factory," said Alfred Krupp, "second-rate material will not be used, and shall not be made."

Alfred Krupp died in 1887. Apart from his inventive genius, his skill in organization had laid the foundation for the rapid rise of the Krupp factory to the eminence it held until the conclusion of the World War deprived Germany of her military power. The "Cannon King" was succeeded by his son, Friedrich Alfred Krupp, who was born at Essen on the 17th February, 1854.

POSSESSOR OF THE KRUPP MILLIONS



Bertha Krupp, the daughter of Friedrich. Although after her father's death the firm was made into a company, actually the Krupp millions and their source belonged to her.

He inherited a vast fortune. "This great wealth," he told William II, with whom he came to be on terms of intimate friendship, "has been a curse to me. If I had not had it I should have devoted myself to art and literature." But he did not shrink from accepting the great responsibility passed on to him by his father who, in his youth, had done likewise. During his fifteen years' management of the great factory, he developed its operations and extended its scope of activities to an extent that far surpassed the dreams of Alfred Krupp.

Friedrich Krupp was primarily a financier. It was by judicious purchases and bold speculations that he consolidated and widened the power of Krupps in Germany. It had always been the policy of Krupps to acquire mines containing the coal and iron necessary for their vast undertakings, and, as early as 1883, they

owned 547 mines in various parts of Germany, several ore beds in Spain, and numerous clay-banks and sand-pits. By this means they obtained complete control over the supply of their raw material.

Friedrich Krupp carried this policy further. In 1896 he caused a sensation throughout Europe by the announcement that he intended to lease the premises of the "Germania" ship-building and engineering works at Kiel, on the shore of the Baltic Sea.

Consternation in Europe

This meant that Krupps were prepared to take over practically the whole of Germany's battleship construction. Something like consternation spread through Europe when it became known that the most powerful firm of armament manufacturers in the world had undertaken to supply Germany with a new fleet. Within six years the lease had been purchased outright, and Krupps had trebled the output of battleships.

"Two years ago," said Mr. McKenna, then Chief Lord of the Admiralty, to the British House of Commons, "anyone familiar with the capacity of Krupps, and other great German firms, would have ridiculed the possibility of their undertaking the supply of the component parts of eight battleships in one year. To-day this productive power is a realized fact, and it will tax the resources of our own great firms if we are to retain the supremacy in rapidity and volume of construction."

Aided by a loan from the German Government, Krupps added 38,000 men to their staff, built new plant and bought still more yards and factories. Between March, 1908, and March, 1909, Germany had nine dreadnoughts on the stocks, and the production of guns and other armament material at Krupps alone exceeded that of all the British factories put together. Essen, with Kiel as an adjunct, had become the chief source of Germany's hope and strength.

A Hive of Industry

Some idea of the activity that took place within the immense factory area at Essen during the height of Krupp's success may easily be obtained from considering the following few facts. Every day there were used 5,000 tons of coal, four million gallons of water, and seven million cubic feet of gas—enough to light a large city—while 56,000 skilled workmen were engaged in manipulating no fewer than 2,000 furnaces and forges, and hundreds of cranes, some of them capable of lifting 150,000 tons. Forty-seven long trains conveyed material over eighty miles of track, and telephone messages from 520 stations sped over 280 miles.

The process of casting steel has been brought to a very high standard of perfection by Krupps.

WHERE THE DEATH-DEALING INSTRUMENTS OF WAR WERE MANUFACTURED



Part of the Essen works. In 1845 only about 120 workmen were employed; in 1902 there were some 60,000 active workers. The little old-world cottage in which Alfred Krupp's father lived, worked, and died, still stands in the midst of the works, dwarfed by the giant buildings and lofty chimneys surrounding it.

After the iron has been partly decarbonized and freed from other impurities by the method known as "puddling"—so called because the liquid metal has to be continually stirred in order to aid the liberation of carbon and the taking up of oxygen—it is melted again in crucibles made of fireclay, and poured through small channels into the mould, where it cools and solidifies into a homogeneous mass.

Crucibles of Liquid Steel

The success of this last and most critical operation depends upon the regularity with which the crucibles of liquid steel, all at an even temperature, are poured into the mould, and in consequence the utmost care has to be taken in organizing and directing the proceeding. An eye-witness has described the scene that takes place when this is done, in the following graphic manner:

On this vast stage swarm hundreds of muffled men, reminding one of ants on a disturbed hill. Amongst them, as if soaring above the ground, move the glowing crucibles, shedding a red glare on the figures and faces of the men who carry them. We soon distinguish that the crowd consists of four currents of men, which, beginning at the farthest furnaces in each corner of the hall, increase as they pass the nearer ones and slowly approach the casting-pit. Each crucible is held by double-handled tongs and carried by two men. These groups, approaching the casting-pit from both sides, pour into it the white, glowing, liquid steel through the side-hole in the cover of the crucible. After emptying it, which

is done in a few seconds, they at once make room for other groups, and, passing down the middle of the aisle, emerge from the crowd, rid themselves of the empty crucible, and return to the furnace to repeat the circuit.

This scene, carried out many times daily, is stage-managed with the utmost vigilance by expert foremen who watch for the least stumbling or hesitation which may mean the ruin of a great ingot worth thousands of pounds, while the men themselves work with tense nerves and scrupulous care, knowing that their pay depends upon the quality of the product. In the manufacture of ingots weighing up to 120 tons, Krupps, for many years, held first place among manufacturers.

Housing their Workmen

In 1906, over 184,000 people, of whom some 60,000 were active workers, depended upon Krupps for their daily bread. The problems of housing, feeding, and welfare in connexion with this vast population were numerous, and might have led to serious labour difficulties had not the foresight of Krupps enabled the problems to be solved in advance. As the demands of the factory called for more and more employees, arrangements were made for their accommodation under ideal conditions and conveniently near to the workshops.

As early as the 'sixties of the last century, Alfred Krupp had begun to build a colony

RUPP FAMILY

joining the factory, and, when his son succeeded him, one of his first steps was to devote \$1,000,000 to the extension of the workers' settlement. There are now many colonies, all situated within a quarter of an hour's walk from the factory, each containing all the institutions and sanitary arrangements of a model township run on a co-operative basis. Well-to-do in the Krupp colonies are independent of the outside world, for all their needs are provided for by a highly organized system, while there are parks, libraries, and theatres for their recreation.

In addition to this, there are schools, both elementary and industrial, hospitals for the

THE PRESENT MASTER OF ESSEN



Gustav Krupp von Bohlen und Halbach, the German diplomat who married Bertha Krupp. On his marriage to the heiress he took the additional name of Krupp.

sick or maimed, and convalescent homes where, amidst beautiful surroundings, veterans, and those broken in health in giving service to Krupp, pass their days in rest.

So powerful an organization as Krupp's necessarily aroused criticism from time to time, and Friedrich Krupp's position was a far from enviable one. As he grew older, dark suspicions and forebodings seized upon him. He lived in a constant state of apprehensiveness, both for his own safety and for that of his business.

Perhaps there has never lived a man to whom boundless wealth and power brought less happiness. Increasing melancholy and dread of revolution undermined his health. This

man who was a millionaire, lived in a state of abject wretchedness, a prey to hysterical fears, many of which were unfounded, and a stranger to peace of mind. He was forbidden by the doctor, who never left his side, to eat any but the simplest of foods.

He died in 1902, when less than fifty years old. It is said that his end was hastened by the appearance of an article violently attacking him and the industry which he had brought to such a pitch of efficiency, in the German anti-militarist paper, the *Vorwaerts*.

Joint Stock Company Formed

After Friedrich's death the original factory and all its auxiliary works were formed into a joint stock company. This arrangement, however, was arrived at merely for the sake of administrative convenience. Actually the Krupp millions and their source belonged to Miss Bertha Krupp, the sole child of Friedrich Krupp. By her marriage, on the 15th October, 1906, to Dr. Gustav von Bohlen und Halbach, who assumed the name of Krupp, new blood was brought into the business.

Dr. Bohlen was born at the Hague, where his father acted as German Ambassador. Both his parents were of American origin. He began his diplomatic career at Washington, and was afterwards at the Pekin Embassy during the time of the Boxer rising. His last diplomatic appointment was as secretary to the Prussian legation at the Vatican.

Meets Miss Bertha Krupp

It was while in Italy that he met Miss Bertha Krupp. For permission to marry her he had to apply to William II who was her guardian. The wedding was celebrated at the Krupp mansion situated in the hills near Essen. William II was present, and he conferred upon the new member of the Krupp family the rank of Minister Extraordinary and Envoy Plenipotentiary.

The new master of Essen found himself at first in a position of great difficulty, for he had to win the confidence of a huge working population devoted to the Krupp family. By his gift of diplomacy, however, Dr. Bohlen gradually established himself, and he successfully piloted the affairs of the great firm through the arduous years of the World War.

In 1923, during the French occupation of the Ruhr, this last leader of an organization which will never again rise to its former power, was arrested, tried and condemned to a term of imprisonment for inciting his workpeople to infringe the military regulations imposed by the Allies in the Peace Treaty.

[See "Krupp's Steel Works," by Friedrich C. G. Muller (1898).]

The PROPHET Who TILTED Against SHAMS

Thomas Carlyle's Struggle to Gain Recognition, and How by His Praise of the Great Men of Old He Spurs Us On Towards High Ideals

"**T**HAT which the world torments me in most," Thomas Carlyle once said to Augustus J. C. Hare, as related in the latter's "The Story of My Life," "is the awful confusion of noise. It is the devil's own infernal din all the blessed day long, confounding God's works and His creatures—a truly awful hell-like combination, and the worst of all is a railway whistle, like the screech of ten thousand cats, and every cat of them all as big as a cathedral."

Thomas Carlyle suffered agonies all his life from noise. In his house at 24 Cheyne Row, Chelsea, the visitor may still see the curious sound-proof attic-study, which he constructed in the hope that within its seclusion he would be free from the noises of crowing cocks, jingling pianos, barking dogs, and noisy tradesmen. Carlyle once told a friend that his ideal study would be a sound-proof room, distant from any dwelling, where the only person that he ever saw in his working hours would be a serving woman who had been born dumb.

His hatred of all noise reveals one aspect of the highly strung, sensitive, and impatient temperament of this great Victorian essayist and historian.

Carlyle's wife, the gifted Jane Baillie Welsh, was equally sensitive to disturbing noises. A crowing cock in the next garden was sufficient to make her nights hideous and her days miserable, and to provoke the composition of despairing letters to her relations.

There has seldom, if ever, been another husband and wife whose private domestic affairs have been the subject of such microscopic scrutiny on the part of others as were those of the Carlyles. Since their death millions of words have been printed, and often violent passions aroused, in attempting to decide whether the Carlyles were happily married or

not. Some have said that Carlyle was cruel to his wife; others that Jane Welsh never ceased to regret that she married the man she did.

It is not our purpose to attempt to sum up the pros and cons of the bewildering controversy, or to pass judgment. Thomas Carlyle himself habitually made use of exaggeration, especially in conversation, and it is only fair to say that incidents in the lives of the Carlyles that appear indicative of domestic unhappiness

have often been exaggerated by others, and undue emphasis has been placed on them, so that they have given a sombre and even tragic colouring to the picture.

As a matter of fact, life within the house at 24 Cheyne Row—then numbered 5—was very far from being disturbed persistently by discords either from without or within. Life there, in normal times, was as agreeable as could, perhaps, be expected in a home which never resounded to the laughter of happy children. The Carlyles had no immediate human interest or companionship apart from each other. Their lives as individuals were consequently self-centred.

Apart from this, while they numbered among their friends many distinguished

men, and some women, they did not live so social a life as did most of their contemporaries. Friends dropped in for a chat; they went out to friends' houses but seldom. Tennyson would call late in the evening, and he and Carlyle would go down together to the basement kitchen, and smoke their pipes. Sometimes, so the story goes, they would smoke several pipes without uttering a word, and then in mutual content they would part company at the door, assuring one another that they had had a most enjoyable evening.

At other times Carlyle would sit on a footstool on the hearthrug in the sitting-room, puffing

THE AUTHOR'S GIFTED WIFE



Mrs. Carlyle at the time of her marriage. Jane Baillie Welsh, known for her wit and beauty as "the flower of Haddington," was the only child of a country doctor.

the smoke from his long clay pipe up the chimney. If the visitor was an old acquaintance, Carlyle would lecture him on the evils of the times, while Mrs. Carlyle sat in silence—it was an old familiar story to her.

There is no better way of understanding Thomas Carlyle than by reading his letters, of which many hundreds have been published. No one can do so without being convinced that Carlyle loved his wife, and she him, and that, in general, he was a sincerely kind-hearted man.

Undoubtedly he was often hard to live with, but there was much in his life to sour his temper. He was middle-aged before his writings received anything approaching adequate

AT THE AGE OF FORTY-THREE



As Carlyle appeared in May, 1839, in which month he made about £200 by a course of lectures on the subject of his famous book, the "French Revolution."

recognition. Even as a young man, his temperament was gloomy—or, as the Scots say, dour. And when his position in the world was assured, his gloomy outlook on life and his solitary habits of work confined him within a rather cheerless world of his own creation. It is certain, too, that his habit of bitter invective left behind it a bitterness in his own heart.

One must, however, do Carlyle the justice of pointing out that all his working life he was assailed by nervous and digestive disorders so painful and disturbing that it was little wonder if he was frequently morose or irritable. Even a few months after his marriage, he described himself as being "sick with sleeplessness,

nervous, bilious, splenetic, and all the rest of it." All through his letters we continually encounter similar proofs of his ill-health. He once said that he could wish Satan no worse than to have his own vile digestion. When he was in Yorkshire, on his way to deliver his rectorial address in Edinburgh, Professor Tyndall found him in the morning in his bedroom "wild with his sufferings. He had not slept a wink."

Devotion to His Parents

Yet there is much that is very lovable in Thomas Carlyle. Nowhere is this distinguishing feature revealed more beautifully than in his devoted love for his father and mother and his brothers and sisters. There is one very touching picture of the aged sage, shortly before his death, driving out from Dumfries to a bridge, which his father had helped to build when he was an apprentice mason. Carlyle was so feeble that he could scarcely walk, but he insisted on getting out of the carriage and fondling the stones of the old bridge, which so many years before his father had handled.

In the "New Letters of Carlyle," edited and annotated by his nephew, Alexander Carlyle, we catch many glimpses of the sage's love for his mother. When he received his first cheque from America, although he was still struggling with poverty and haunted by the "terror of want," he sent £5 to her.

On his fifty-sixth birthday Carlyle wrote this very tender letter to his mother:

Fifty-six years is a long time, dear mother; but yet it is short, and no longer than a moment to Eternity, which is the real date that all of us, young and old, belong to. We have had our share of toils and contradictions, sorrows enough, each one of us; but has not the great Father been good to us? Oh, yes; oh, yes."

Mrs. Carlyle Writes to Her Son

From the same book we will quote a further letter, from the mother to her son, just to complete this beautiful picture of filial love:

My dear Son,—I should have written long before now, but always put off; I come so ill at it. Believe me, it is not for want of good-will; as you are so mindful of me, so you are not long out of my mind. May God reward you for your kindness. We are all in our usual way; I am spinning on the big wheel; it procures one sleep. Do you sleep well? I often think of you when I am taking my smoke at bed-time. We may pray for one another. It is a great mercy we have free liberty. . . . I will be very warm through the winter, if I am spared, with my new dresses. May God clothe the givers with the robe of the Redeemer's righteousness.

The love of Carlyle for his parents never faltered or wearied for a single moment. He was ever anxious that they should want for nothing. Once as an old man he went to Ecclefechan kirkyard, to see their graves.

There they all lay, so still and dumb, those that were once so blithe and quick at sight of us; gathered to their sleep under the long grass. I could not forbear a kind of sob, like a child's, out of my old worn heart, at sight of all this.

No one can read the letters of Thomas Carlyle to his parents and still entertain any doubts as to the tenderness and goodness of the man. The same is true of his letters to his wife. These letters mirror the soul of Carlyle with a satisfying completeness, and flatly contradict the fragmentary and often prejudiced impressions brought away from Carlyle's presence by those who knew him only as casual visitors or acquaintances.

Carlyle writes much about his father in his "Reminiscences." The elder Carlyle was a man of great strength of character, a master stone-mason in the village of Ecclefechan, Dumfriesshire, and afterwards a small farmer.

Although it is said that in his best years as a master mason his income was only £100, it should be remembered that, considering the times in which he lived, this income in the lowlands of Scotland indicates that he was comfortably off. It indicates, too, that he occupied a position far superior to that of the "peasant," which some writers, who did not understand the social life of Scotland, have ascribed to him.

The Ecclefechan Home

In the village of Ecclefechan stands a plain stone house with an arch in the centre leading into a yard, and with a little stream, or burn, rippling by in the middle of the village street. This house was built by Carlyle's father. The arch divided the house into two separate three-roomed dwellings, James Carlyle living in one, and his brother in the other.

It was in the humble three-roomed house on the right side of the arch that Thomas Carlyle was born on the 4th December, 1795. The house is still standing in good condition, and is now maintained as a Carlyle museum, visited daily by pilgrims from all over the world. Thomas was his parents' first-born, but after him came a large family of brothers and sisters, to whom their elder brother was always devoted, never grudging them any practical help.

Intended for the Ministry

James Carlyle was a deeply religious man, and, like many another Scotsman, he intended to make his eldest son a minister. Thomas was accordingly given the best education possible, first in his native village, then at Annan, from which town he went to Edinburgh University. He was at the university for four years, but, having eventually decided against the plan for

making him a minister, he became a school-master at Annan, and later at Kirkcaldy. Afterwards he became a private tutor.

Removing again to Edinburgh, he began the life of an author, and it is easy to see how authorship appealed to him as a serious career by his observations on this subject in his "Life of Schiller," which he wrote for the *London Magazine* about this period.

If an author's life is more agitated and more painful than that of others, it may also be made more spirit-

CARLYLE'S SOUND-PROOF STUDY AT CHELSEA



His hatred of noises led Carlyle to build a sound-proof study at the top of his house in Cheyne Row. In this safe retreat he would remain for hours among his books, emerging at tea-time for a chat with his wife.

stirring and exalted; fortune may render him unhappy, it is only himself that can make him despicable. The history of genius has, in fact, its bright side as well as its dark. And if it is distressing to survey the misery, and what is worse, the debasement, of so many gifted men, it is doubly cheering, on the other hand, to reflect on the few who, amid the temptations and sorrows to which life in all its provinces, and most in theirs, is liable, have travelled through it in calm and virtuous majesty, and are now hallowed in our memories, not less for their conduct than their writings.

Guiding Rule of His Life

The above was written by Carlyle as a young man in his first book, the magazine articles being afterwards published as a volume. It almost seems as though Carlyle must have adopted these opinions as his own motto in life; certainly the passage might well serve as his own epitaph.

While he was laying the foundations of his literary career, he was also laying siege to the fickle and proud heart of Jane Baillie Welsh, who already had many admirers and suitors. Jane Welsh, who was five years younger than Carlyle, was the daughter of a doctor of Haddington, at which place she lived with her widowed mother.

She was a fascinating young woman, lively, ambitious, and intellectual. Before she and Carlyle met, each had experienced an unsuccessful love affair. Jane Welsh had fallen in love with Edward Irving, her tutor, who returned her affection. The unfortunate Irving, however, was already engaged to another, whom he subsequently married. Carlyle also had previously declared his love for a girl in a good position, but her friends had interposed and parted them.

Warned Against Pride and Aloofness

A very significant glimpse of Carlyle's personality at this period is furnished by a passage in the letter of farewell which the youthful Margaret Gordon wrote to Carlyle, ending their friendship: "Genius will render you great. May virtue render you beloved. Remove the awful distance between you and ordinary men by kind and gentle manners."

Carlyle was about twenty-five years old when he was introduced to Jane Welsh by Irving. Jane's mother possessed some property, which afterwards furnished the Carlyles with a small income when they badly needed it, but there is no justification for saying, in view of Carlyle's intellectual gifts, that a country doctor's daughter married beneath her when she married an author who had received a university education and who had been a schoolmaster.

Whatever may have been the reason the woman who so profoundly influenced Carlyle's life, and whose personality figures so prominently in all our memories of the man himself, was very hard to win. These two lovers were persons of equally strong character, and each was the other's intellectual equal. Both, beyond any doubt, were endowed with genius.

A Sincere and Resolute Wooer

Carlyle was obviously deeply in love with Jane Welsh. The sincerity of his affection was proved by the unflinching patience with which he steadily pursued his wooing. That wonderful and illuminating book, "The Love Letters of Thomas Carlyle," reveals with extraordinary vividness the progress of this historic courtship, and lays bare the hearts of both the writers in language of unique and rarest beauty.

Oh, Mr. Carlyle (wrote Jane Welsh after Carlyle had declared his love) . . . use as you ought your precious time and the noble powers that God has given you, and waste no hours or thoughts on me.

Nearly two and a half years after the correspondence had commenced, she wrote:

Your Friend I will be, your truest most devoted friend, while I breathe the breath of life; but your Wife! Never, never! not though you were as rich as Croesus, as honoured and as renowned as you yet shall be.

The citadel of Jane Welsh's heart fell at last, after a siege lasting over five years, and the two

were married. Nor must it be thought for a moment that she was a reluctant bride; her letters before and after her marriage prove that she loved Carlyle as whole-heartedly as he loved her. Indeed, some of the letters which she wrote to her husband from Craigenputtock, during his brief absence from home—five years after their marriage—are brimful of the most exquisite tenderness.

For a time the young couple lived in a pleasant house at Comely Bank, Edinburgh. Carlyle was still struggling to gain an established position in literature, but, no doubt, his circumstances were often straitened, owing to the precarious nature of his employment and the irregular income which it provided. It was probably in order to reduce their expenses that the Carlyles decided to remove to the hill farm of Craigenputtock, in Dumfriesshire, which was Mrs. Carlyle's inheritance. Carlyle's plan was that they could live in the house rent free, while the land could be let.

Craigenputtock Described

This bleak habitation was, no doubt, well suited to the solitary habits of work which Carlyle had already formed, but it was a difficult place for housekeeping, and cheerless and cold in the winter. It was sixteen miles from a post office. Carlyle himself described his habitation at Craigenputtock as "the loveliest in Britain."

Mrs. Carlyle, before her marriage, had scoffed at the idea of living on this hill-farm. In after years Carlyle was wont to look back upon this Craigenputtock period as a healthy, strenuous, and bracing episode, though it must often have been a very dull life for a woman of Mrs. Carlyle's sociable nature.

They were poorly off, despite their economies, although they each had a pony for riding exercise and a servant maid did the heaviest housework. Among their few compensations was a memorable visit from Emerson, the famous American philosopher.

The Writing of "Sartor Resartus"

The Carlyles lived about six years at Craigenputtock, and it was here that Carlyle wrote "Sartor Resartus," the first work from his pen that attracted public notice and really set him on his feet as an author.

On the crest of this wave of prosperity the Carlyles came to London, taking up their abode in a modest house in Chelsea which they never afterwards left. The rent of this house was only £30 or £35 per annum, and for the greater part of their remaining years they lived in a plain style. Yet their circle of friends included many of the most famous literary men of their day—John Stuart Mill, Leigh Hunt, Browning, Tennyson, De Quincey, Emerson, Dickens, and

WHISTLER'S FAMOUS PORTRAIT OF THE SAGE OF CHELSEA



Portrait of Carlyle, after the painting by Whistler, in the Glasgow Art Gallery. Whatever we may think of Carlyle's teaching, we should in justice remember that the merits or defects of a preacher must be gauged rather by the way in which his conclusions stimulate thought than by the soundness or falsity of his conclusions. Although Carlyle early gave up all idea of the ministry, he remains for succeeding generations at once a notable prophet, preacher, and teacher.

For biographies not included in the Groups see detailed Index

others almost equally brilliant and distinguished.

Many of the eminent people who were their contemporaries have left us their impressions of the Carlyles. Professor Blackie, after spending an evening with Carlyle, referred to him as "really a notable monster." "His pessimism was monotonous, and sometimes wearisome," said Mr. Goldwin Smith. "He was the greatest of the Britons of his time—after the British fashion of not coming near perfection; Titanic, not Olympian; a heaver of rocks, not a shaper," wrote George Meredith.

WHERE HE LIVED FOR FORTY-SEVEN YEARS



No. 24 (formerly No. 5) Cheyne Row, the old-fashioned house in Chelsea, which was Carlyle's home from 1834 until his death. In 1895 it was bought for the public, and became a museum for Carlyle relics.

George Meredith, in a letter published in *Scribner's Magazine* many years ago, passes a very fair judgment on the domestic relations of Carlyle and his wife:

Between him and his wife the case is quite simple. She was a woman of peculiar conversational sprightliness, and such a woman longs for society. To him, bearing that fire of sincerity, as I have said, society was unendurable. . . . Such a man could hardly be an agreeable husband for a woman of the liveliest vivacity. . . . They snapped at one another, and yet the basis of affection was mutually firm. She admired, he respected, and each knew the other to be honest. Only she needed for her mate one who was more a citizen of

the world; and a woman of the placid disposition of Milton's Eve, framed by her master to be an honest labourer's cook and housekeeper with a nervous system resembling a dumpling, would have been enough for him.

Both Carlyle and his wife were apt to be satirical in their judgment of others. William Allingham, in his "Diary," tells us that after Carlyle had sat to Whistler for his now famous portrait, the sage described that great painter as "the most absurd creature on the face of the earth."

Often violent in his opinions, embarrassingly outspoken, treating even Queen Victoria, who had asked to meet him, "like an ordinary mortal," as Lady St. Helier tells us, Carlyle, nevertheless, sometimes met his match. The late Lord Airedale was once introduced to Carlyle as a manufacturer from Leeds. Carlyle was rather gruff. "Leeds is a shoddy manufacturing town, is it not?" "Do you know what shoddy is, Mr Carlyle?" asked his visitor. "You write a great deal about shoddy. Would you mind if I told you?" Then the manufacturer explained that shoddy is rags which are torn up by machinery, washed, and turned into wool. Made into cheap cloth, it enables clean and cheap garments to be manufactured for working people. "Oh," said Carlyle, rather subdued, "I had not heard that aspect of the question."

A Peep at Cheyne Row

Professor David Masson, who knew the Carlyles well in Cheyne Row, has left a pleasant picture of their domestic life as a friend and admirer found it.

If you dropped in about or a little after seven o'clock you found Carlyle and Mrs. Carlyle at tea in the drawing-room, and were welcome to a cup yourself, with a slice of bread and butter or biscuit—jam generally on the table besides. If you were later, you missed the tea, but might talk as long as you chose to stay, and might see Carlyle fill his pipe and smoke it once or twice in the course of an evening; and even, if you were in his good graces and capable of communion with him in that particular, be invited to join him. His pipes, then and always, were long clays of Glasgow make, with green glazed tips for the mouth. . . . The pipe he was using—and I think he took a new pipe every day, or perhaps oftener, from the stock he kept somewhere in a box—usually stood in a corner of the fireplace, within the fender, ready for his further service.

There was no end to the friends who called, and on occasion the Carlyles also went visiting, though this was a rare enough occurrence. In "Jane Welsh Carlyle: Letters to Her Family, 1839-1863," we have a lively account

by Mrs. Carlyle of a wonderful evening she spent at the Macreadys' in 1843 :

Dickens and Forster above all exerted themselves till the perspiration was pouring down, and they seemed drunk with their efforts ! Only think of that excellent Dickens playing the conjurer for one whole hour—the best conjurer I ever saw (and I have paid money to see several)—and Forster acting as his servant.

This part of the entertainment concluded with a plum pudding made out of raw flour, raw eggs—all the raw usual ingredients—boiled in a gentleman's hat—and tumbled out all reeking—all in one minute before the eyes of the astonished children and astonished grown people ! That trick, and his other of changing ladies' pocket-handkerchiefs into comfits, and a box full of bran into a box full of a live guinea-pig ! would enable him to make a handsome subsistence, let the book-seller trade go as it please.

Then the dancing—old Major Burns with his own eye—old Jordan of the *Literary Gazette* (escaped out of the Rules of the Queen's Bench for the great occasion), the gigantic Thackeray, &c., &c., all capering like Mænads ! !

After supper, when we were all madder than ever . . . a universal country dance was proposed, and Forster, seizing me round the waist, whirled me into the thick of it, and made me dance, like a person in the treadmill, who must move forward or be crushed to death. Once I cried out, "Oh, for the love of Heaven, let me go !—you are going to dash my brains out against the folding-doors !" to which he answered—"Your brains ! Who cares about your brains here ? Let them go !"

Surely such a wonderful night as this, and the extraordinary privilege of seeing Dickens convulsing everybody for a whole hour by his efforts as a conjurer, were compensation enough for many dull days at Cheyne Row.

Jane Welsh Carlyle's life ended in a very sad way. When he was seventy-one, Carlyle was elected Rector of Edinburgh University, and while he was in the north for the purpose of delivering his rectorial address, he received the terrible news that Mrs. Carlyle had died suddenly in her carriage while driving in Hyde Park. The old philosopher was overwhelmed by her death.

After the burial, which took place at Haddington, Carlyle secluded himself from the world as much as he possibly could. By this time he had an income far above his modest needs, but a gloom like a heavy pall had settled over his life—he could enjoy nothing.

For a while he stayed with friends, then moved back into Cheyne Row for the last time. Perhaps the one bright incident in his closing

years was when, in 1874, he received the Prussian Order of Merit, an honour given to him for so well portraying the life of Frederick the Great. In the same year Disraeli, in most flattering terms, offered him a pension and the Grand Cross of the Bath, but Carlyle refused both these offers, though he said at the time that he felt touched by the profound generosity of the only man of whom he had never spoken except with contempt.

As the years passed by, the gloom settled more heavily. He became feeble and infirm, but still struggled out on his feet, a well-known figure in the London streets. Even when he had to abandon this pleasure he continued his excursions in omnibuses or carriages,

GREEDILY DEVOURING THE "DECLINE AND FALL"



Carlyle was a glutton for books. When, as a young man, he became the possessor of Gibbon, he hurried home with the six precious volumes under his arm, and, with his mind starving for want of food, devoured them at the rate of one a day.

such was the strength of his indomitable spirit. At the beginning of 1881 his frail body collapsed, and the end came on the 4th February.

An offer was made to bury him in Westminster Abbey, but in accordance with his wishes it was declined. Carlyle now rests by his parents in the old kirkyard at Ecclefechan.

His Stand for Higher Ideals

To understand Carlyle's philosophy one must read the books he has written. Whenever Carlyle received the opportunity he preached long and loudly his dissatisfaction with the existing order of society and politics. In this he was a radical, and, like all other radicals, he warmly welcomed the movement for the much-needed Reform Bill. He saw it as the first important step towards Liberty and higher ideals.

He was no "philosophical radical." He went some way with the Mills and their associates, but they stopped their programme of reform too soon for his progressive mind. Carlyle looked much farther ahead. He favoured a reconstruction of institutions and principles that swept far beyond the ken of the "philosophical radicals."

Though his principles had a tinge of the revolutionary spirit about them, he was not the type

ENJOYING A WALK IN HIS DECLINING YEARS

Intensely earnest in his desire to promote higher ideals, his great remedy to kill sham was work. He was never tired of preaching this gospel: "Whatsoever thy hand findeth to do, do it with thy might." "Work while it is day; for the night cometh, when no man can work." Age could not quench his fiery spirit, neither could the pain that racked his body.

Though many may not agree with all the teachings of Carlyle, he cannot be condemned by his opponents. The merits of a preacher must not be calculated by the rightness or wrongness of the conclusions at which he arrives, but rather by the way in which these conclusions stimulate thought among men.

His Writings

Of Carlyle's writings the magnificent prose epic, "The French Revolution," is perhaps the most widely admired. Speaking to his wife of this amazing work, he said, "You have not had for a hundred years any book that comes more direct and flamingly from the heart of a living man." It was his exquisitely written article, "The Diamond Necklace," that led him to study the history of the French Revolution.

Many think "Frederick the Great" his masterpiece. Though without the fire of the "French Revolution," it is a biography of extraordinary power, and was described by Emerson as the wittiest book ever written. It is said that Carlyle's description of campaigns were used by military students in Germany.

In "Oliver Cromwell" Carlyle has a hero after his own heart, and gives a portrait at once vivid and sym-

pathetic. His "Hero-Worship" is a favourite. Carlyle's sympathy with the poor and the oppressed is shown in "Chartism" and "Past and Present." His "Life" of Sterling is one of his calmest and most charming writings.

[See Carlyle's "Reminiscences," edited by C. E. Norton (1887); and "Love Letters of Carlyle and Jane Welsh," edited by A. Carlyle (1909).]



Carlyle on the Chelsea Embankment. Although infirm and feeble, the old philosopher enjoyed his daily walk, and he became a well-known figure. Even when he had to give up walking, he continued his excursions in cabs and omnibuses.

of revolutionary who seeks to destroy ruthlessly and to replace one tyranny by another. He was greatly opposed to materialism, considering it to be one of the worst cankers that sap the moral growth of man, but, nevertheless, in theology he appeared as a sceptic.

In everything that Carlyle wrote his hatred of hypocrisy and weakness found expression.

The FIRST PRESIDENT of the UNITED STATES

George Washington, Whose Achievements Secured Liberty and Stable Government and Entitle Him to be Called "The Father of His Country"

IT has already been observed in this work that Benjamin Franklin, whose ancestors had been yeomen in Northamptonshire for hundreds of years, was one of England's greatest gifts to the New World. An even greater figure—George Washington—also had ancestors who had long been domiciled in the same county of England, where their homes and graves can be seen to this day.

The ancestral home of the first president of the United States of America was Sulgrave Manor, Northamptonshire, where Lawrence Washington flourished in the reign of Henry VIII. He was a member of the legal profession, and a considerable man in the county, having been twice mayor of the county town—in 1533 and 1546. On the suppression of the monasteries by Henry VIII, Lawrence Washington, in 1539, became possessor of Sulgrave Manor, which had previously belonged to a priory, and he built the house which is still preserved as a memorial to the Washingtons.

Lawrence and his wife, Amy, are buried in Sulgrave church, and their tomb is the object of pilgrimages by many Americans. The first Washington to be lord of the manor of Sulgrave died in 1584. His son, Robert, sold the manor in 1610, and removed to a small but substantial house of stone in the village of Little Brington, about twelve miles away. The date on this house, also fortunately standing to-day, is 1606.

Robert Washington had a son, Lawrence, who is buried in Brington church, and who had a very large family. One of his sons, also named Lawrence, was a clergyman of the Church of England, and was at one time rector of Purlough, in Essex. He flourished at a period when troubles beset England, and two of his sons, John and Lawrence, the great-

great-grandsons of Lawrence Washington, squire of Sulgrave, emigrated to Virginia in 1657.

George Washington was the great-grandson of the above-mentioned John, and was born at Wakefield, his father's estate, in Westmorland County, Virginia, on the 11th February (Old Style) or the 22nd February (New Style),

1732. His father was Augustine Washington, whose plantation of about 1,000 acres stood on the banks of the Potomac.

George was the first-born of his father's second marriage, and when he was eleven years of age his father died. His mother, whose name was Mary Ball, was only thirty-five at the time of her bereavement, and was left with six boys and one girl, two of the boys being step-sons. She was, however, well provided for, having a productive plantation, besides land in other parts of the colony.

The family, therefore, lived in easy circumstances, enjoying a similar standard of life to that of a well-to-do country squire in Eng-

land. Although George and his brothers may not have been very well educated, judged by modern standards, they were all brought up as gentlemen, for in Virginia, even in the eighteenth century, there was already an order of landed nobility, some of them scions of the older nobility of England, who, with their great estates and their slaves, lived much as great landowners did in the Mother Country.

Many a time does the great George Washington himself, in his diaries, record the fact that he had been fox hunting with his neighbour, Lord Fairfax, in Virginia. Indeed, his eldest step-brother, Lawrence, married a Fairfax, and it was he who built the historic mansion of Mount Vernon, which George Washington afterwards inherited.

ON THE BATTLEFIELD AT TRENTON



On the 2nd January, 1777, Washington, having recrossed the Delaware River, succeeded in turning Cornwallis's left flank at Trenton.

In order to understand the relative position of England and her American colonies, which George Washington was destined to alter so materially, a brief explanation of the settlement and pre-revolutionary history of these colonies will be helpful. In the popular mind, the first settlement of the division of North America now known as the United States is associated with the Pilgrim Fathers. But they settled only one small part. The tide of settlers entered America at several points on the east coast, and the communities and colonies they established were for long far removed from, and absolutely independent of, each other.

As a matter of fact, the first English settlement in America was not that of the Pilgrim Fathers in New England, but the colony established by about 100 people from England, who

WHERE GEORGE WASHINGTON LIVED AND DIED



Mount Vernon, in Virginia, Washington's timber-built mansion-house overlooking the Potomac River. It was given the name by Washington's half-brother, Lawrence, who served in the British navy under Admiral Vernon.

landed in Virginia in 1607. These earliest settlers endured great hardships, and many died, but their numbers were soon added to by newcomers from England. By 1619 a central government had been established at Jamestown, and about the same time a Dutch ship sold the first negro slaves ever seen in America to the Virginia settlers.

Some of the Early Settlements

It was not until thirteen years after the first settlement of Virginia that the Pilgrim Fathers landed at New Plymouth. Boston was first settled in 1630, and Pennsylvania in 1682. The Dutch had settled on the site of New York in 1614, and the Swedes in Delaware in 1638, but these two settlements were afterwards taken by the English. English colonies continued to be established at different points until Washington's time, Georgia being settled

as late as 1733. When Washington was a boy, there were thirteen named American colonies, and although the idea of a union between them had been mooted by far-seeing men, there was at that time no thought of severance from the Mother Country.

The closeness of the relationship between England and her American colonies is very well illustrated by the early life of George Washington. His elder step-brother, Lawrence, had served in the British navy, and when George was fourteen years of age the decision was made that he also should enter the service as a midshipman.

Does Not Go to Sea

The ship of war on which he was about to embark actually lay at anchor within sight of his home, and George would have sailed in her but for the fact that, at the last moment, his mother changed her mind on receiving a letter from her brother, Joseph Ball, in London, strongly advising her to keep her boy at home rather than allow him to enter an employment where he would, so the writer said, be treated like a dog. He actually told his sister that her boy would be better off as a tinker than as a midshipman in the British navy of that day.

Another profession had to be found for George, and fortunately an opening occurred close at hand. Land was being sold, estates were being established, and primeval forests were being cleared for plantations, and the services of land surveyors were in constant demand. This was the profession chosen for the youthful George Washington as an alternative to the navy, and before he was sixteen he was placed in the employment of Lord Fairfax as a surveyor's assistant.

Interest in Land Surveying

It will be remembered that Abraham Lincoln was, later on, to adopt the same profession, in order to escape from poverty. George Washington never knew poverty, and had no necessity to struggle for a livelihood, but, nevertheless, he took his profession as seriously as Lincoln did, and became in course of time a far more experienced surveyor. Indeed, Washington continued to take a practical interest in land surveying throughout the remainder of his life.

Surprisingly little that is authentic is known about Washington's boyhood. The story about the good little boy who "couldn't tell a lie" is a myth, and those who originated this and similar stories, in order to idealize him, did his

WASHINGTON AND HIS GENERALS IN WINTER QUARTERS AT VALLEY FORGE



In December, 1777, the American army, numbering about 11,000 men, encamped at Valley Forge, in Pennsylvania, and their sufferings from cold, sickness, and starvation have become historic. In vain Washington pleaded with Congress to relieve the situation. Although there were some desertions, the army in the main endured their privations with the utmost fortitude.

memory a disservice. Washington needs no such aids to sustain his greatness. He was never a prig. Nor could he have been of so beautiful a countenance as he is depicted in most of his portraits, for he had smallpox when he was twenty, and its marks he carried to his grave.

What is certain is that he lived the free and healthy life of a country boy in easy circumstances. He learnt to ride and shoot and hunt, and engaged in all the country sports and amusements so conveniently at hand in a wild and beautiful country. He received only a rudimentary education. One of his school companions has said that George was fonder of the girls among his schoolmates than the boys, and in his earliest letters he certainly shows himself susceptible to a pretty face. These early letters also indicate that he was somewhat uncertain in his spelling.

Begins His Real Training

His real training in life began when he took up land surveying, travelling on horseback through the country, sleeping in the woods, associating with the backwoodsmen and the pioneers, and being brought into hourly contact with all that was beautiful and grand in nature. From his entry into this employment he kept a diary, which is still preserved, and in its pages one can already observe the deeper qualities of the man making themselves apparent.

Finding that some of the huts in which

hospitality for the night was offered were dirty, he learnt, and preferred, to sleep on the ground, within the warmth of a camp fire. He often swam his horse across a flooded river, rode forty miles in pouring rain over roads that were quagmires, made himself at home in houses where there was neither knife nor fork, and shot a wild turkey for his dinner. In one of his entries he expresses his "agreeable surprise" at meeting a party of thirty Indians returning from war with only a single scalp.

Making Use of His Knowledge

This first-hand knowledge of and skill in wood-craft helped materially in securing for George Washington the opportunity to show his quality in the public service. He was commissioned, when he was twenty, by the governor of Virginia to visit and deliver a letter to the commander of the French forces, at a point about 600 miles distant. He travelled on horseback and by canoe through what was practically a wilderness, and was able to successfully fulfil his mission.

Washington, by the time he had attained his majority, was a fine figure of a man, exceptionally tall and strong, straight as an arrow, and a splendid horseman. About this time, on the death of his brother Lawrence and the latter's only child, he inherited the Mount Vernon estate, and so began to occupy a position of considerable social importance in the colony.

For biographies not included in the Groups see detailed Index

GEORGE WASHINGTON

Adopts a Military Career

His inclinations, however, were towards a military career, more especially as the colony of Virginia, as well as the other English colonies in America—although, apparently, so far removed from the centre of European militarism—was at that period under the shadow of a military menace. This menace came from the north, where the French in Canada were obviously seeking to extend their influence into the very heart of the American continent, in the rear of the English colonies situated along the coast.

Attains the Rank of Colonel

A small militia force was raised in Virginia, and Washington was given command of one of the companies. When he was twenty-two years of age, he had so far succeeded in his new career that he had attained the rank of colonel. He had, moreover, while commanding about forty Virginians and a few Indians, surprised a French force, and, after a brief and sanguinary engagement, dispersed them, killing ten and taking over a score of prisoners. Among the killed was the French officer in command, and it was a bitter blow to the young Virginian, who took his military duties so seriously, to be afterwards accused of having

"assassinated" his opponent. However, the French had their revenge, Washington and his little force being defeated by superior numbers not long afterwards.

The French menace proved quite as serious as the far-sighted Washington had anticipated. Very soon the French were sending regiments to America, and the English Government had to follow suit. The new commander of the English was General Edward Braddock, whom Benjamin Franklin befriended on his arrival in America, securing him farm wagons for transport, and being considerably out of pocket for a while as a result of the expenditure to which he was thus put.

Braddock Ignores Franklin's Warning

Franklin has left it on record that Braddock knew nothing of the craftiness and devilish cunning of the Indians, who formed a large proportion of the French forces in America, and foolishly regarded his "regulars" as invincible against what he described as "savages." When the worthy and astute Franklin warned him of the danger, Braddock (to quote the words of the great Pennsylvanian) "smiled at my ignorance." "I was conscious of an impropriety," adds Franklin, "in my dis-

WASHINGTON DELIVERING HIS INAUGURAL ADDRESS IN NEW YORK



On the 30th April, 1789, Washington was inaugurated first President of the United States. After he had taken the oath prescribed by the constitution and been proclaimed President, Washington was greeted by a salvo of guns and by loud and continuous cheering. "His Excellency then retired to the Senate Chamber and delivered his speech."

For biographies not included in the Groups see detailed Index

THE "FIRST CITIZEN OF THE UNITED STATES" ACCLAIMED BY THE PEOPLE



"Washington's Grand Entry into New York City, April 30th, 1789." About twelve o'clock the procession started from the President's house in Cherry Street, followed by a multitude of citizens. Near the Federal Hall the troops formed a line, and Washington, passing through the ranks, was conducted into the building and introduced to both houses of Congress.

putting with a military man in matters of his profession, and said no more."

Braddock invited Washington to serve on his staff, and the young Virginian colonel, desiring, as he did most sincerely, "to serve, with my best abilities, my king and country," accepted the invitation. Washington advised Braddock to employ mainly Indians, as they were the only warriors able to fight Indians—and certainly the American Iroquois would gladly have thrown themselves upon their hereditary enemies, the Algonquins and the French—but Braddock apparently thought that all Indians were equally contemptible savages, and openly despised the loyal Iroquois, as much as he did the Indian allies of his French enemies—as it proved, to his undoing.

The English Disastrously Defeated

The result was disaster. The English, trying to cut a direct pathway through the forest with axes, were ambuscaded. Braddock himself was fatally wounded, over fifty of his officers and six hundred of his men were killed and wounded, and the survivors of the massacre fled in panic. The disaster was all the more astounding as Washington, who was present, says that the English had 1,300 men, chiefly

regulars, while the attackers numbered only three hundred.

The important feature of this defeat, from the point of view of American history, is the fact that George Washington, as he wrote himself, was "protected beyond all human probability and expectation." Twice he had a horse shot under him, and four bullets went through his coat, yet he was unhurt.

Reasons for His Mortification

The letters that he wrote at this time show clearly how terribly he felt the mortification of his defeat. Not because it reflected any disgrace on him. Far from it. Reckless of his own life, he had striven to rally the soldiers, and, if he could have got them to follow him, he would probably have turned a pending defeat into victory; but the panic of the English soldiers, occasioned by the presence of an unseen foe, was beyond his power to overcome. The shame he felt was on account of the disgrace inflicted upon the English uniform he wore, the army commission conferred on him by an English governor, and the general prestige of the English army in America.

In view of the fact that George Washington has so often been regarded as an enemy of

England, and one of those who wrested from her one of her most extensive and valuable territories, it cannot be too strongly emphasized that in this hour of defeat, and for many years afterwards, the King of England had no more loyal subject, even in England, than George Washington.

The war with France dragged on, with its heart-rending massacres and its scalping of defenceless people on frontier farms. Washington was still on active service, and it was while so engaged that he met Martha Custis, a widow of twenty-six, who was the mother of four children by her first marriage. Washington married this lady on the 6th January, 1759. She was good-looking, religious, and well-bred, but without intellectual brilliance or strong personality like her husband. The marriage proved to be a very happy one, although it was not blessed with any children.

Life as a Country Gentleman

Some time afterwards Washington was again able to settle down to the life of a country gentleman at Mount Vernon. His wife was a wealthy woman, and socially the Mount Vernon household became one of the most notable in Virginia. Washington managed his plantation with scrupulous care, delighting in its development. Like his neighbours he, of course, owned slaves. With his own hand he wrote out the long orders for furniture, clothes, and household articles, which he had sent out to Mount Vernon by his agents in London, and such were the circumstances of his position that he could give instructions for the ship carrying his belongings to discharge the goods alongside his estate on the Potomac River.

Outside his home he had many public duties. He was a member of the House of Burgesses of Virginia, a vestryman of his church (the Church of England), and a freemason. Pohick church, six miles from Mount Vernon, was built from plans drawn by Washington himself, which are still preserved, and here he acted as a vestryman for a score of years, and regularly worshipped with his family. After 1783 he attended Christ Church, in Alexandria, which was the nearest market-town to Mount Vernon.

Masonic Relics of Washington

Washington was the first master of the masonic lodge in Alexandria, which, after his death, possessed many interesting personal relics of the great American, and also what is considered to be his most life-like portrait.

At Mount Vernon George Washington spent the happiest days of his life. The house, with much of its furniture, still exists as it was in Washington's time, and every room and every

yard of ground has some memory associated with "the Father of his Country." It was here, according to tradition, that George as a lad displayed his strength by throwing a silver dollar across the Potomac, but, as one of the guides at Mount Vernon used to say, "money went much farther in those days!"

Dignified but Simple Tastes

Washington kept his own pack of hounds, and, as has already been mentioned, often went fox hunting. His manner was always dignified and stately, yet his tastes, despite his wealth, were quite simple. He went to bed at nine o'clock regularly. This peaceful life as a country gentleman lasted for nearly fifteen years after his marriage. During that period his mind was most concerned with his home and his farming.

He was especially interested in tobacco growing and horses. He was a most hospitable man, and his diaries and letters, of which there are an enormous number, show that all his life he had a keen sense of humour, and enjoyed a joke even when it was against himself, as on the memorable occasion when, while fighting against the English, he laughingly returned unopened a letter from the English commander addressed to "Mr. George Washington," and also a second one with the curious amended address: "George Washington, Esq., etc."

It was not George Washington who set in motion the forces which led to the American revolution. Far from this being the case, he remained loyal to the English king as long as he possibly could, and, until the die was finally cast, he strove to effect a settlement by peaceful means and without resort to war, for which, indeed, no man knew better than he the colonies were ill-prepared.

Causes of the Revolution

It is not possible to explain all the causes that led to the War of American Independence. Suffice it to say, that the fire was kindled by the various efforts made by the English ministry to impose taxes on the Americans. The first opposition to this policy arose in the Virginian House of Burgesses. That opposition was not originated by Washington, but by the resolutions framed by another member of that house, Patrick Henry. The opposition was based on the principle that in a free country there can be no just taxation without representation.

For several years the opposition pressed its views upon England by constitutional means. Washington himself was strongly of the opinion that the most effective method would be for the American people to cease drinking tea or using any other goods imported from England. There were men of eminence in England who readily appreciated the Ameri-

can point of view, and who deplored the provocation given to the colonies. among them Burke and Chatham.

In his diary under the date the 1st June, 1774, Washington made this entry: "Went to church, and fasted all day." This day had been appointed as a day of fasting and prayer throughout Virginia, for the two countries now seemed inevitably drifting into war.

Washington was one of the special delegates appointed by Virginia to attend the first revolutionary congress, held at the Carpenters' Hall, Philadelphia, in the autumn of 1774. This congress remained in continuous session for seven weeks, and drew up the celebrated Bill of Grievances. There were greater orators than Washington present, but in counsel he was already the outstanding figure.

Commander-in-Chief

The second revolutionary congress was held at Richmond, Virginia, in March, 1775, and there Washington was elected commander-in-chief of the forces of the colonies. This was a position of immense responsibility, which Washington did not seek or desire, and, indeed, shrank from, but, as he wrote to his wife, to whom he was now unable to return: "It has been a kind of destiny that has thrown me upon this service."

There was no elation in Washington's breast as he took up the sword. Rather was he filled with the most solemn and mournful thoughts. "Unhappy it is to reflect," he wrote to his friend and neighbour, Fairfax, "that a brother's sword has been sheathed in a brother's breast, and that the once happy and peaceful plains of America are to be either drenched with blood or inhabited by slaves. Sad alter native! But can a virtuous man hesitate in his choice?"

The story of the war, about which so many volumes have been written, is quite well known. Washington's difficulties were almost incredibly stupendous. There was no central government to vote the army supplies, no organization, no arsenals to provide munition

of war, no hospitals, scarcely anyone in America with any experience of leadership or warfare. There were many great patriots, like Franklin and Jefferson, to voice nobly the country's aspirations, and the whole American people were behind their commander, believing that in some miraculous way Washington would deliver them, but how this was to be brought about was left to him.

For a year after war had been in progress, even Washington himself hoped that a final severance from England might be avoided.

WASHINGTON'S LAST INTERVIEW WITH HIS MOTHER



Washington was devoted to his mother. Her last words to her distinguished son were: "Go, George, fulfil the high destiny which Heaven appears to have intended you for; go, my son, and may that Heaven's and a mother's blessing be with you always."

But the breach widened every hour, and on the 4th July, 1776, after Washington had compelled the English to evacuate Boston, the Declaration of Independence was proclaimed, and the United States of America came into being. The war dragged on until 1781, when Lord Cornwallis surrendered at Yorktown, on the 19th October. Peace was finally signed in 1783.

After the war Washington again retired for a time to his beloved home, Mount Vernon.

He wrote to a friend, "The first wish of my soul is to spend the evening of my days as a private citizen on my farm." But the difficulties of the new republic were far from settled, and the country still stood in great need of his leadership. It was in truth an immense task to frame for the first time a constitution for a central Government which would satisfy the desires and the inevitable jealousies of the numerous political leaders of thirteen states.

Unanimously Elected President

Washington exercised a powerful steadying influence on the American people during the critical period that followed the declaration of peace, when even the great ideal of union among the states themselves was in jeopardy. He presided over the Convention at Philadelphia, in 1787, which framed the Constitution of the American republic. By unanimous vote he was elected the first president of the United States, and he was inaugurated on the 30th April, 1789. Washington's mother did not live to see this honour conferred on her distinguished son, having died in 1788.

The United States owes and fully acknowledges an undying debt to George Washington for his work as a statesman during the remaining years of his life. His was an extremely difficult task, but his genius, his judgment, and

his far-seeing wisdom proved equal to every problem and burden laid upon him. One of his master strokes was his inflexible determination not to entangle the United States by participating in European quarrels of any kind, although his refusal to side with France against England in the war of 1794 aroused hostile feelings in Congress.

His Famous Farewell Address

After a second term as president, Washington retired into private life in 1796. Before doing so, he wrote his famous "Farewell Address to the American People," in which he embodied the fruits of his wisdom and experience, and sought to direct the thoughts and activities of his fellow-countrymen along lines that would ensure the greatness and glory of the infant republic.

The end of his great life came suddenly. Having been riding in snowy weather, he caught a severe cold, and, after being ill only two days, he died at Mount Vernon on the 14th December, 1799, aged sixty-seven. He was buried at Mount Vernon, according to his own wish, in a simple tomb of brick.

[See *Lives* by J. A. Harrison (1906), J. Sparks (1842), Woodrow Wilson (1897), "Writings of George Washington," edited by J. Sparks (1833-39), and "The Story of the Revolution," by H. C. Lodge (2 vols., 1898).]

THE GREATEST AMERICAN DIES PEACEFULLY AT MOUNT VERNON



Washington died at Mount Vernon on the 14th December, 1799, from exposure during a long ride in a snowstorm. His last words were loving remembrances to relatives, business instructions, and apologies for the trouble he was giving to his physicians and attendants. Just before he breathed his last, his secretary records, he felt his own pulse.

For biographies not included in the Groups see detailed Index

A ROMAN Who CHANGED the WORLD'S HISTORY

*The Undying Fame of Julius Cæsar, the Illustrious Roman Ruler and Statesman,
Who Laid the Foundations of Western Civilization*

ONE man alone in the history of the world achieved so great a reputation that, ever since his death, kings have delighted to use his name as their title. That man was Gaius Julius Cæsar.

All the Roman emperors are known to us by the general name of Cæsar, just as all the kings of ancient Egypt go by the title of Pharaoh; while, before the World War, three rulers in Europe, the Austrian and German kaisers, and the Tsar of Russia, still bore witness to Julius Cæsar's fame by their official titles.

Julius Cæsar most probably came into the world on the 19th of the Roman month Quinctilis (corresponding to our July, and thus named after him) in the year 102 B.C. or 101 B.C. He came of an ancient patrician family, whose members had long been distinguished as exemplars of Roman virtue and courage, his uncle Marius at the time of Cæsar's birth being the foremost figure in the republic.

Of Cæsar's early boyhood and education we know nothing, or next to nothing, beyond that it was the ordinary upbringing of a patrician youth. Marcus Antonius Gniphio was his tutor.

and, on Plutarch's authority, this man was full of ability, a profound Latin and Greek scholar, and a pleasant man with winning, genial manners. Such was the master who guided Cæsar during his most impressionable years, and who probably little thought that his pupil would one day become the greatest figure of the ancient world. Cæsar grew to be tall for a Roman (the ordinary height of his countrymen was only about 5 feet 4 inches), with a noble brow, and fine intellectual features.

During Cæsar's thirteenth year civil war broke out, and though he was, of course, too young to take an active part, the boy at once

enlisted all his sympathies with the party of popular government, who were struggling against the oligarchical senate. Marius, his uncle, was the champion of this popular party. At first he was successful, and in his triumphs remembered his young nephew, whom he caused to be nominated *flamen Dialis* (a priest of Jupiter), and on whose behalf he set about, negotiating a rich marriage. Soon, however, Marius fell, and fled into exile, where he died

ADDRESSING THE MALCONTENTS



Once, when Cæsar was absent from Rome, a serious revolt spread among his legions. On his return he addressed them in such a skilful way that soon they were all clamouring to be reinstated in his affection.

(86 B.C.), and with him fell the popular party. Cæsar, who had assumed the *toga virilis* (the Roman equivalent for "coming of age") in the previous year, became an intimate of Cinna, Marius' successor, whose daughter Cornelia he then married.

By 82 B.C., Sulla, leader of the oligarchs, was firmly established in power, and for the time being all Cæsar's hopes of a brilliant career were shattered. Accordingly, in 81 B.C., he sailed to Asia Minor, and remained in the East until Sulla's death (78 B.C.). Cæsar soon showed his ability both as a soldier and as a diplomat in the war Rome was carrying on against Mithradates. He also served in Cilicia against the hordes of

pirates which infested its coasts. During this period he was once captured by pirates and taken to the island of Pharmacussa, pending the arrival of a ransom. While waiting for its arrival, Cæsar made friends with his captors, and jokingly promised that one day he would return and crucify the lot of them. About a year later he kept his word.

On his return to Rome, Cæsar turned all his energies to destroying the faction Sulla had left behind him. During four years he worked away solidly, until, in 70 B.C., the last vestiges of the Sullan power vanished, and the popular party, of which he was now an influential member, came into its own once more. For

the next eleven years, with one short interval, Cæsar was to remain at Rome, busy carving an official and political career for himself.

Cæsar at first acted in close harmony with Pompeius (better known as Pompey), who had now emerged as the central figure in Roman affairs. In 67 B.C., Pompey was given complete command in all parts of the Mediterranean for three years, in order that he might exterminate the pirates, who had then become a menace to trade. Pompey, therefore, left Rome in search of military laurels, leaving Cæsar quietly to pursue his progress from one public office to another.

Elected *Ædile* with Bibulus

Almost directly after Pompey had left Rome, Cæsar was elected *ædile*, together with Bibulus. His duties now included the care and preservation of all Rome's public buildings and works, the erection of new undertakings, and the management of the circus in the Colosseum.

In 63 B.C., Cæsar was elected *pontifex maximus* (chief priest of the official State religion), an appointment which marked his tremendous popularity. On the day of his election, his aged mother, Aurelia, accompanied him to the door as he set out, filled with anxiety as to whether her son would return a conqueror or a corpse. Throughout her life, Cæsar remained a devoted son; his triumphs never prevented him from deferring to her in conversation, nor did the shrewd Aurelia ever cease from criticizing his policy, although actually her son and his career were all that she lived for.

Catiline Conspiracy Discovered

Soon after this the famous conspiracy of Catiline was discovered. It provided a political crisis of the first order, and gave Cæsar an opportunity to make his most famous speeches. Cæsar was all for moderation in punishing the conspirators, and gained immensely in prestige by his policy, so that in the next year he was elected *prætor*—one of the most important officers of State. During Cæsar's *prætorship* Pompey returned triumphant from his expeditions against Mithradates and the pirates. Cæsar and he still remained allies and friends, but soon the former, oppressed by a growing burden of debts, determined to leave Pompey at Rome, while he himself, accepting a military command (his first of any standing), went off to Spain.

Although he had only a small sphere in which to work, and a scanty army, Cæsar speedily accustomed himself to regular campaigning against the Iberian Gauls. There are but scanty records of his exploits, and he certainly made no great name for himself, but those who served under him soon per-

ceived that he was a military genius. Returning to Rome after a year, Cæsar stood as candidate for one of the two consulships, and was elected. His position and prestige now rendered him the dominant political personage in the State, so, forming a "triumvirate" with Pompey and Crassus, he proceeded to establish a rule of rigorous law and order.

A Reward of Strenuous Work

Wise laws were passed, corruption suppressed, distress alleviated. After a most useful and strenuous year of office he was appointed by the Senate to control Cisalpine Gaul (Northern Italy), to which was added all north-west Europe beyond the Alps (Transalpine Gaul) and the Alps themselves. With this appointment went four legions of troops. At last Cæsar had found a sphere of action worthy of his genius.

Thus at forty Julius Cæsar laid aside the toga of the politician for the sword of the soldier. During the next eight years he was engaged in continual campaigning, the story of which he so succinctly told in his dispatches to the Senate. These "Commentaries" of his tell us all the story of his active life, but so impersonal are they that practically nothing of what Cæsar, the man, thought or desired can be gathered. "All Gaul is divided into three parts," he begins, and continues for hundreds of pages—a perfectly clear and impersonal account of his wonderful achievements, using the third person invariably when speaking of himself.

As a military record, however, the "Commentaries" are well-nigh perfect, for they give an exact and detailed account of each campaign and state the reasons for every step taken. From them it may be gathered how excellent a general was Cæsar. During these short years of warfare he reduced a free and warlike people—the Gauls—to complete submission and obedience, and added a province stretching from the Atlantic to the Rhine, from the Loire to the south of present-day Holland, to Rome's possessions.

First Two General Actions

His first task was the protection of the Roman provinces immediately beyond the Alps, which were threatened by a general insurrection. During the campaign of 58 B.C., Cæsar fought his first two general actions, and in each case won a decisive victory, first over the Helvetii, and then against Ariovistus—an erstwhile ally of Rome's—and his Germans. The few who escaped from Cæsar in this latter engagement fled across the Rhine, which then for the first time, became the boundary of the Roman Empire. By these two decisive strokes, moreover, Cæsar quelled all France, and caused

CÆSAR'S FIRST VISIT TO THE SHORES OF BRITAIN



During the year 55 B.C., Cæsar was led by his curiosity to visit the shores of Britain. He landed at Pevensey, so tradition says, but so determined was the resistance made by our rude forefathers that the great Roman was forced to re-embark his men, sail away to Gaul, and there prepare for a second and much larger expedition.

the distant and hostile rumblings from beyond the Rhine to cease.

The following year Cæsar marched north against the Belgæ, a fierce and treacherous people who gave Belgium her name. They and the Nervii, their allies, occupied his attention during the whole of the campaign, and he returned to winter quarters triumphant, it is true, but worn out and exhausted, having fought and marched and laboured like any common soldier in his legions.

Puts Down a Revolt

The army and their general had scarcely recovered from their fatigue, however, before news arrived that the whole coast, from the Loire to the Rhine, was in a blaze of revolt. Cæsar, who was taking a holiday in northern Italy, hurried back, collecting his army on the way and marched off against the Veneti, the principal instigators of the insurrection. Falling on them by sea and by land, he cut them to pieces and captured most of their fleet, taking an immense number of prisoners in the process. These he sold into slavery, as an example of what makers of rebellions might expect at his hands. Speedily following up this victory, within a year Cæsar had all Gaul reduced and pacified once more.

During the year 53 B.C., Cæsar made his first expedition to the shores of Britain, led on to

do so largely from mere curiosity. The exact spot of his first landing has been the subject of a tremendous controversy among learned men, and, though opinions differ, it is, perhaps, best to agree with those who believe that he landed at Pevensey (where, by the by, most of the dramatic landings in English history seem to have taken place). The story of the actual landing has become legendary, and all have read how, when the soldiers held back, the standard-bearer of the 10th Legion leapt into the water, bearing his eagle standard high above his head, and cried out: "Come on! Leap ashore, soldiers, unless you would betray the eagle to the enemy."

Forced to Return to Gaul

Our rude forefathers, however, put up a most gallant and determined resistance to Cæsar's troops, and as eighteen transports had been parted from the main body in a storm, and since an unusually high tide damaged the rest of his fleet, Cæsar re-embarked his men and returned to Gaul. During the ensuing winter he prepared for a new expedition on a larger scale, building and preparing quite a considerable armada for the purpose.

By the spring of 54 B.C., all was prepared, and Cæsar's troops assembled for embarkation, probably near Boulogne. Adverse winds caused a tiresome delay of more than three

weeks, but at last the passage across the Channel was safely accomplished, and a landing effected without opposition. On the very night of his arrival, however, Cæsar was forced to fight a minor engagement, while on the next night a storm again caught the fleet and seriously damaged almost every ship.

Before leaving the coast, Cæsar, prudent as always, repaired this damage, his soldiers working day and night in shifts for about a fortnight. Then, his communications secure, he struck inland. His progress was resisted by the Britons under Cassivellaunus, a chieftain to whom the defence of the country had been entrusted. For a week or more Cæsar pushed forward, desultory attacks being made upon him each day.

On the Bank of the Thames

At last the Romans stood on the south bank of the Thames facing the Britons in force on the north. Between the two armies lay a ford which the Legions carried, and then defeated the forces of Cassivellaunus without much difficulty. The Britons retired to their impenetrable forests, and contented themselves with occasional sallies in their scythed-wheeled chariots, a weapon which considerably disconcerted the Roman soldiers.

Cæsar now perceived that he could not possibly hope to conquer Britain with the forces at his disposal. Having satisfied himself by a more or less formal submission from Cassivellaunus and the other chiefs, and having imposed a tribute on them (purely as a matter of form, since there would be no one to collect it), he returned to his fleet and sailed back to Gaul. So ended Julius Cæsar's descent upon Britain, and since it is the first event in British national history of which there is any record, it must always remain particularly interesting and curious.

Vercingetorix Makes a Stand

Cæsar returned to Gaul to find that advantage had been taken of his absence, and that a rebellion had broken out. For two years the Gauls struggled fiercely to regain their freedom. A simultaneous attack was delivered upon all the Roman garrisons, and their effort was at first only too nearly successful, for Cæsar had one division of his troops entirely annihilated. Mention cannot be made of all the fluctuations of this struggle, but Cæsar certainly had his powers taxed to keep the situation in hand. Vercingetorix, a heroic chieftain, was the centre of this last great fight for freedom, and around him rallied all the bravest and fiercest of the Gauls.

At last, however, by foreseeing and forestalling his plans in an amazingly adroit manner, Cæsar caught him in a trap and surrounded

him. Vercingetorix disdained to fly, as he might have done, but surrendered his sword personally to Cæsar. With him the last flames of resistance died down, Gaul was pacified (51 B.C.), and for the next five centuries, remained a Roman province.

During all these strenuous years Cæsar had naturally got out of touch with domestic politics at Rome. It became clear to him that Pompey could no longer be relied upon as his friend and ally. Pompey had married Julia, Cæsar's daughter, but during 54 B.C. she had died, and thus snapped a powerful bond which held the two men together. The fact is the Roman Empire, vast as it was, was not large enough to hold two such leviathans as Cæsar and Pompey. They were bound to clash before long, and Cæsar, astute, calculating, and full of foresight and moderation, had laid his plans most carefully long before the inevitable clash occurred.

A Crisis in Rome's History

On the 1st January, 49 B.C., the Senate, briefed by Pompey, curtly demanded of Cæsar that he should resign his command. This demand reached Cæsar when he was at Ravenna, in northern Italy, with only one legion; and although his force seemed insufficient, Cæsar never hesitated for a moment, but called upon his men, and marched south against Pompey. By sending this message, moreover, the Senate, all unconsciously, had sealed its own fate, for never again was that august body to sit as the rulers of the civilized world. Thenceforward men were to follow Cæsar's example, and to act, or, for the most part to attempt to act, for themselves.

About the middle of January, Cæsar crossed the Rubicon, a little river which happened to form the frontier of Italy proper. This was a decisive step of invasion. As he crossed he remarked, "the die is cast," and "crossing the Rubicon" has since become a proverbial expression for taking any such momentous step. Pompey and the Senate anticipated that he would now march upon Rome, and, since they had no troops at hand there, they abandoned the city and hurried off to Capua, where two legions lay.

Pompey at Brundisium

Cæsar, however, had no intention of marching on the capital, but seized the central towns of the Apennines, which surrendered to him without resistance. Slowly, but surely, he marched southward, as Pompey gave ground before him, until at length the latter and his army were penned up in Brundisium (modern Brindisi). Cæsar was unable to prevent their embarkation here, and so, by the end of March, Pompey had escaped to Greece with his troops,



leaving Cæsar undisputed master of Italy—and without a single battle having been fought.

Leaving Pompey for the time being to his own devices, Cæsar next turned to destroy his former ally's officers, who were in command of Spain. He marched thither and proceeded to perform prodigies against Pompey's veteran generals. Again and again it seemed as though Cæsar and his army must be destroyed, but on each occasion, by astounding skill and coolness, he extricated himself and worsted his opponents. Soon, in fact, all the Pompeians had surrendered, and the province of Spain lay in Cæsar's hands.

Cæsar then resumed his attack on Pompey, who was holding Dyrrhachium, on the eastern coast of the Adriatic. In January, 48 B.C., he sailed from Brundisium, landed, and at once marched on his objective. For some while he was baffled for lack of reinforcements, but these at last arrived, under Antinous, Pompey in vain trying to prevent a junction between Cæsar and his lieutenant. Reinforced, Cæsar swooped down on Pompey's stronghold and offered battle, but Pompey refused to risk a general engagement, although Cæsar's army hemmed him in on all sides but one, and on that side lay the sea. At last, however, Pompey was forced to try to break out, and, succeeding in his attempt, Cæsar and his army suffered a severe and crushing defeat.

The Battle of Pharsalus

Recovering from this temporary setback Cæsar managed to force a pitched battle, and the two armies met on the field of Pharsalus. Pompey was crushingly and utterly defeated, losing 15,000 killed and wounded, and about 24,000 prisoners. This blow terminated Pompey's career, for, although he escaped, he was deprived of all his power and position by the disaster, and soon afterwards he was brutally and treacherously murdered, an act of which Cæsar had no cognizance until he reached Egypt.

Desirous of disposing of his most formidable adversary, Cæsar at once turned to complete his work of conquest, and followed Pompey into Egypt. On landing at Alexandria he was met with the sight of Pompey's head, which had been severed from the trunk by a treacherous blow from one of his old centurions. Here he met Cleopatra, then only a very young woman, but already charming and attractive. In fact, except for her potent charms, no other reason can be given for Cæsar's long stay in Egypt, where a popular tumult nearly

destroyed him, but subsided as quickly as it arose. When only seventeen, Cleopatra had been appointed joint ruler of Egypt with her younger brother, Ptolemy Dionysus, but the youthful queen was soon deprived of her authority and retired to Syria to concert measures to recover her power by the sword. It was then that Cæsar came upon the scene. The great warrior took up arms on her behalf, defeated Ptolemy, and placed Cleopatra once more upon the throne.

REFUSING THE CROWN OFFERED BY MARC ANTONY



During certain festal celebrations, Marc Antony approached his fellow-consul, Cæsar, and offered him a crown. Cæsar, in declining the offer, made himself more popular than ever.

By July, 46 B.C., Cæsar was back in Rome, having conquered the entire Mediterranean world in less than five years. During four days he celebrated four separate triumphs—over Egypt, Gaul, Africa, and Pontus—and then, perhaps a little tired by all this splendour, he settled down to govern the world he had conquered. Cæsar proved himself as indefatigable in government as he had been in warfare. He put in hand countless new and wise measures, and undertook immense public works. Rome offered him a crown, but he refused it.

Realizing that the old republican institutions had outgrown their usefulness, Caesar sought to place the government on a stable footing by gathering all the power into the hands of one man, and he himself was made dictator. But many of the old senatorial party were averse to this new rule, because they thought that such a government, however good in itself, might lead to a tyranny. A conspiracy was, therefore, formed against Caesar. Most of the plotters were doubtless actuated by envy and other base motives, although some, like Marcus Brutus, were prepared to sacrifice even a friend in what they held to be the cause of liberty.

The Fateful Ides of March

The Senate was to meet on the 15th March (the Ides of March), 44 B.C. Caesar had been told by a soothsayer to "beware the Ides of March," but, in spite of this warning and of his wife's entreaties, he proceeded to the meeting. Arrived in the Senate House, he was surrounded by the conspirators, who fell upon him with their daggers and stabbed him to death. Covered with wounds, he fell at the foot of Pompey's statue. Brutus, Caesar's friend, who plunged a dagger into the dictator's

side, and to whom Caesar's last words "Et tu, Brute!" ("Thou too, Brutus!"), were addressed, is placed by Dante in the bottommost pit of Hell, together with Judas Iscariot. So died Caesar in the height of his glory, betrayed and murdered by those whom he most trusted.

Diplomat, Author, and Orator

In the story of Caesar's life we can find little that is dark or doubtful in his behaviour, nor can we to-day form any adequate idea of how really great and original a genius he was. Brilliant as a general, he was also an astute diplomat, an accomplished author, and a magnificent orator. By sheer personality and tenacity he at last held all the ancient world in the hollow of his hand. He found Rome distracted and weakened by oligarchical intrigues. He left her ready to enjoy the golden and glorious days of the early emperors.

Caesar was one of the few figures of history who have radically altered the course of the world. He stands out, with Napoleon, Nelson, Wellington and one or two others, towering far above the men of all ages.

[See Caesar's "Commentaries" and "Diary of the Civil War," and Lives by J. A. Froude (1879) and W. W. Fowler (1892).]

ASSASSINATION OF ROME'S GREATEST RULER AND STATESMAN



Despite the soothsayer's warning and his wife's entreaties, Caesar proceeded to the Senate on the 15th March, 44 B.C. On his arrival he was fiercely attacked by those who had determined to put an end to his rule. At first he defended himself, but when his friend Brutus approached, dagger in hand, he gave up the struggle and fell, pierced with many wounds.

For biographies not included in the Groups see detailed Index

The GREATEST of the SPANISH PAINTERS

The Noble Art of Velasquez, Whose Consummate Mastery of His Craft has Made the Great Personages of His Day Live Before Our Eyes

IT is a truism that many who follow the professions of art and music receive next to no recognition in their lifetime. Too often they live and die in poverty, and it is only after their death that fame comes.

While this does not entirely apply to Velasquez, it has a certain measure of truth. Velasquez never lived in poverty; he was recognized during his lifetime as a good artist. But he had been dead nearly 200 years before the world realized the truth about him, and that is, that he was one of the greatest painters of history, and the head of the Spanish school.

It was in the first week of June, 1599, that Diego de Silva y Velasquez first saw the light. His birthplace was the sunny town of Seville, and his father, Rodriguez de Silva, was a lawyer of means, and descended from a noble Portuguese family. Thus Velasquez is an exception to what has come to be regarded as the general rule—that great artists are born in humble surroundings.

There seems to be some doubt as to the full name of the artist, but, following a common custom of Spain, he took as surname his mother's maiden name, Velasquez. His father intended him to follow his own profession, that of law, and to this end the lad received a good and careful education, learning languages and philosophy. Very early in life, however, he demonstrated a decided talent for drawing and painting, and, as there was no financial reason why he should not adopt art as a profession, he was placed for instruction under a well-known artist of his native town, the elder Herrera.

Velasquez' master was a fine, bold painter, and there are a number of his works in Seville

to this day. He was entirely unaffected by the Italian influence which had spread to Spain by the end of the sixteenth century, and was undoubtedly an excellent teacher. He had, however, one great disadvantage—a hasty temper—and as a rule his pupils did not remain long with him.

Velasquez managed to stay longer than most,

although this was but a single year. Nevertheless, it was long enough to lay the foundations of the success which came to him in after years. It has been suggested that it was from Herrera that Velasquez learned the use of brushes with long bristles, which gave a lightness and delicacy to the colours on his canvas that others have failed to repeat.

The young artist's second master was of a very different type from the first. Whereas Herrera was bold and original, Pacheco was dull and commonplace. But at his studio, where Velasquez remained for five years, he met all the best of the literary and artistic circles of the city. Here he spent his time in studying proportion and perspective, and in making love to his master's pretty daughter, Julia. In this he was encouraged by Pacheco, and before long the two were married.

Pacheco was exceedingly proud of his son-in-law pupil, and claimed all the credit of being his master. We cannot, however, accord Pacheco much more than the giving of lessons in proportion and general technique; for the rest, Velasquez disobeyed orders, for, when he should have been studying Raphael and the other Italian masters, he would be found copying what his master would call "common things," that is to say, the peasant people carrying their earthenware jars in the market-place,

THE PAINTER'S ROYAL PATRON



One of Velasquez' many portraits of Philip IV of Spain. This monarch was for 36 years the friend of Velasquez. He declared that no other artist should paint his portrait.

and the birds and beasts and flowers and trees which he saw around him. He cared only for painting what he saw.

Not for him were the visions and dreams of other artists; he was a realist of realists, and if he could reproduce the light and shade on the human face, the poetry of motion of a galloping horse or a flying bird, the gay colours of flowers and a dandy's coat, he was satisfied. "I would rather be the first painter of common things than the second in higher art," he is reported to have said, and this remark summed up his whole creed of art. He was intensely interested in the world about him and in the characters of his sitters, and he endeavoured to portray everything as faithfully as possible. He may thus be likened to the Pre-Raphaelites in England two hundred years later.

Study of the Human Face

Velasquez early realized that the human face was capable of an infinite variety of expressions, and he determined to make this his special study. To this end he engaged as his servant and model a peasant lad, and drew him in charcoal and chalk at every possible opportunity, thus founding the mastery of expression which became his forte in later days. Some of these early studies have survived, and we have a typical example in the "Laughing Peasant Boy" of the Belvedere Gallery in Vienna.

The artist's close study of nature can be seen in other pictures of this time, notably in "The Water Carrier," with its strong outlines and mastery of light and shade. Other interesting pictures include two sacred subjects, the "Adoration of the Magi," which is dated 1619 and hangs in Madrid, and the "Adoration of the Shepherds," in the National Gallery in London. Velasquez has made no attempt to take his subjects from Palestine; the women of the market-place in Seville, typical Spanish peasants offering their gifts of poultry, were his models, and we find him painting his peasant servant as "St. John in the Desert."

Eager to See the World

But even marriage and an established position in his native town did not suffice the artist. He was eager to see more of the world, and, attracted perhaps by the goodly number of Titians to be found in Madrid, he set forth in 1622 for the Spanish capital, accompanied only by his servant. He evidently made a considerable impression during his few months' visit, for the following year saw him summoned to return by Olivares, the powerful minister of Philip IV. For this he received 50 ducats by way of expenses, and a year later 300 ducats to pay the cost of removal of his wife and family to Madrid.

Whatever may be said against Philip IV as a ruler—and there is certainly a good deal to say—he was a great lover of art, and something of a painter himself. It is also to his credit that for thirty-six years he remained the firm friend and patron of Velasquez; indeed, he declared that no other artist should ever paint his portrait.

In the King's Service

Thus as early as 1623 we find Velasquez firmly established in the royal service, with a retaining fee of 20 ducats a month, free lodgings and medical attendance, and payment for any pictures he might paint. His first effort was a portrait of the king on horseback, which was received with enthusiasm, not only by the king himself, but by all who saw it. Unfortunately this picture has disappeared, having probably been destroyed by fire.

There are, however, two portraits still in existence which were probably studies for the picture. Charles I of England, when Prince of Wales, was at the Spanish Court about the same time, and it is recorded that he sat to Velasquez, but this picture, too, has disappeared, although it has been claimed that it was included in the sale of Lord Fife's pictures in 1809. The majority of experts, however, decided against it.

Gentleman Usher to the Court

After his arrival in Madrid, we find a great improvement in the painting of Velasquez. A certain harshness, which was apparent during his apprenticeship at Seville, disappeared, and in its place there came more delicate tones and firmness of outline. We can see it in the splendid groups of Court gallants, resplendent in the gayest of gay costumes, and in the "Meeting of Artists," now in the Paris Louvre, which may be accounted one of his greatest pictures. We might see it, too, in the "Expulsion of the Moors," were that painting still in existence, but, unfortunately, it was destroyed by fire in 1734. It was the winning picture in a competition open to all the artists of Spain, and it brought the successful artist the distinction of being appointed gentleman usher to the Court.

Before long Velasquez' allowance was increased by 12 reals a day—the amount that was allowed to the Court barbers—and he was also given 90 ducats a year for clothes. That painters did not receive the same consideration as they do to-day is shown by the fact that the dwarfs and clowns of the Court received the same dress allowance.

In 1628 Rubens visited the Spanish capital, remaining there for nine months, and Velasquez was given the pleasant occupation of guiding the great Italian painter to the art treasures of

A VIVID REPRESENTATION OF A FAMILIAR BIBLE INCIDENT



"Joseph's Coat," after the original painting in the Escorial. Joseph's brethren are seen bringing back their brother's coat to Jacob. Here, as in all Velasquez' paintings, the artist remains true to himself. The treatment is realistic and thoroughly Spanish, bearing no trace of the influence of the Italians. Joseph's brothers are typical Andalusian peasants.

Spain. A weaker man than Velasquez might have had his style affected by Rubens, particularly as the latter had a high opinion of the Spanish painter's work. But Velasquez made no alteration in his style or the treatment of his subjects.

Effect of Rubens' Visit

One effect the visit of Rubens did have on Velasquez—it gave him the strong desire to visit Italy and to study the work of that country's great masters, and he accordingly applied to the king for the necessary permission. This was accorded in 1629, and without loss of salary. What is more, Philip IV made him a present of 400 ducats and Olivares an additional 200. In August of the same year he set sail from Barcelona, having as travelling companion De Spinola, the conqueror of Breda, who undoubtedly gave him the subject which he painted many years later.

Most of his time in Italy was spent in copying the old masters—Raphael, Tintoretto, Michelangelo, and the rest—but the Spanish

character of his art remained quite unaffected. In Rome, for instance, he painted his celebrated picture, the "Forge of Vulcan," but depicted the interior of a typical Andalusian smithy. In one thing only did he forsake the tradition of Spanish art—he painted a number of delightful landscapes, thus proving himself a master of a branch in which Spaniards have very seldom excelled.

Portrait of Don Baltasar Carlos

While in Italy he also painted a number of portraits, none, however, so powerful as that in Spain of Don Baltasar Carlos, the young heir to the throne, attended by Olivares, an influential minister of the Court. Ranking very close to this is an equestrian picture now in the Madrid Gallery.

In 1631 Velasquez returned to his native country, and once more devoted himself to the painting of Court scenes, and, above all, his royal master. We are fortunate in possessing in the National Gallery in London what may, perhaps, be described as the finest

portrait he ever painted and, indeed, one of the finest pieces of portraiture in existence. The whole picture is full of life—with the single exception of the face of the king, and in this, with its want of animation, its lack-lustre eyes, its up-curling moustaches and long, fair, flowing hair, we get a wonderful insight into the weakness of his character.

Philip wears a stiff linen collar of his own invention, the *golilla*; he was so proud of it that he caused a festival to be held in its celebration, which was followed by a procession to church to return thanks for the blessing. His vanity may be judged by the fact that every night his moustaches were put into per-

A STately LITTLE SPANISH MAIDEN



Portrait of Philip IV's daughter, the Infanta Margarita. This forms part of the famous picture in the Madrid Gallery known as "Las Melinas" ("The Maids of Honour").

fumed leather cases in order that their shape might be preserved.

Meanwhile, Velasquez' importance as a Court official steadily increased, he having been promoted from his first position as usher in 1634. In 1640 he was given a pension of 500 ducats, —increased to 700 in 1648—and in 1647 he was appointed inspector of works in the palace.

It is unfortunate that there do not exist

many portraits of women by Velasquez; indeed, this may be called a Spanish characteristic, for, apart from queens and infantas, the artists of Spain have given us very few pictures of their beautiful women. There is, however, one notable exception, a portrait of an unknown woman which is now in the Wallace Collection in London, and in which the flesh painting is marvellous. About this time, too, Velasquez painted Philip's first wife, Isabella of Bourbon, and her son, Don Baltasar Carlos, who has been mentioned before.

His Finest Religious Painting

We have not many religious paintings by the great Spanish master, but of those which we have, the greatest—"Christ on the Cross"—was painted during this period. Against a black sky is outlined the Cross, on which hangs Christ, His spirit having just departed from Him, His head fallen on His breast, and His face half hidden by His hanging hair. It is a work of great beauty and pathos, and was originally intended for the convent of San Placido, though it is now in the Madrid Gallery. A skull and serpent were added at a much later date by an inferior artist, and the picture was also lengthened to fit its place in an oratory. This latter addition has since been removed, though, unfortunately, the former remains.

Philip IV had long cherished the desire to found a national academy of art. As far as pictures went, Spain possessed a vast quantity of treasures. But statuary was lacking, and accordingly, in 1649, Velasquez was entrusted with the task of purchasing such works as were necessary to make the collection representative. Setting out from Malaga with his slave Paroja—whom he taught to be quite a good painter—he arrived at Genoa, and then went on to Venice, travelling by way of Milan. During his journey he bought a number of pictures as well as statuary, acquiring examples of Tintoretto, Titian, and Paul Veronese. From Venice, Velasquez proceeded to Rome, where he painted his great portrait of Pope Innocent X. This has been described by Sir Joshua Reynolds as the finest picture in Rome.

His Third Style of Painting

It is painted in what may be called his third style—much bolder than his second, and, of course, with far more knowledge of technique than in his first. Most of the pictures of his third style appear a trifle coarse when closely examined, but when standing a short distance away this vanishes and in its place there appears a wonderful living quality and a depth which has been the despair of his many imitators.

It was just before his departure to Italy that he was commissioned by Philip to decorate

MASTERPIECES OF SPAIN'S GREATEST ARTIST



Don Baltasar Carlos as a field-marshal. This is one of the many portraits that Velázquez painted of Philip IV's heir, who died at the age of seventeen. It is in the Prado, Madrid.

For biographies not included in the Groups see detailed Index

IMBUED WITH ALL THE EMPHASIS OF LIFE



The Doria Palace, Rome, boasts this magnificent portrait of Pope Innocent X, which was regarded by Sir Joshua Reynolds as the finest picture in Rome. The severe, impassive face of the pontiff is modelled to perfection.

For biographies not included in the Groups see detailed Index

A SPANISH LADY OF HIGH DEGREE



In this portrait of a high-born lady of Spain, wearing her mantilla and handling her fan with inimitable grace, Velasquez shows the firm, free touch and facile strength of a great master of his craft

For biographies not included in the Groups see detailed Index

APOLLO BRINGS EVIL TIDINGS TO VULCAN



Portrait of King Philip IV of Spain the famous artist's lifelong and devoted patron



The young Don Baltasar Carlos, as dignified and stately as his royal father, Philip IV



"The Forge of Vulcan" In a typical Andalusian smyth Apollo is seen breaking the news of the perfidy of his wayward spouse Venus to the god of fire. The pictures reproduced on this page are in the Prado, Madrid

For biographies not included in the Groups see detailed Index

THE KING OF SPAIN DECORATES VELASQUEZ WITH THE CROSS OF SANTIAGO



There is a tradition that Philip IV, when visiting Velasquez' studio, saw a portrait of the artist on an easel, and painted the red cross of Santiago with his own royal hand. The story is also told of the picture called "The Maids of Honour," but the artist received the honour after that painting was executed.

the walls of his new summer palace, and on it Velasquez painted the famous "Surrender of Breda." It represents Justin of Nassau handing the keys of the city to his conqueror, Spinola, the last of the great Spanish generals. It is not only a noble decoration, but one of the world's finest historical paintings, though some painters have declared that the two ideas are incompatible.

Comparison with Rubens' Work

It is interesting to compare this work with the historical decorations of Rubens, now in the Louvre in Paris. The latter present a blaze of colour, a pageant of imagination in which gods and goddesses and allegorical figures mingle with the actual personages. Velasquez, on the other hand, keeps always to the simple and touching circumstances of the incident. Even in his enthusiasm of painting a great decoration, he preserved his passion for truth.

In 1651 Velasquez returned to Spain, bring-

ing with him some 300 pieces of statuary as well as many pictures. The former did not last very long, for the Spanish Church set its face very strongly against undraped figures, and after Philip's death the statues gradually disappeared.

In the meantime, however, the work of cataloguing them kept the artist busy, while the fact that he was still further promoted to the rank of "aposentador mayor" left him still less time for painting. This new office involved looking after the quarters of the Court, whether at home or when travelling. But it is during this period that he painted what many consider the finest of all his works.

The "Maids of Honour"

"Las Mefinas," or the "Maids of Honour" as it is called in English, merits a longer description than can possibly be allowed within the space of a short article. The story is that Velasquez was painting a portrait of the king and queen, who sat where the spectator is

when looking at the picture, when their little daughter, the Infanta Margarita, came in with her maids of honour, her dwarfs, her dog, her duenna, and a courtier. The little princess asked for a drink of water, and, with all the ceremony of the most rigidly ceremonious Court in Europe, it was handed to her by the maids of honour.

So charming a scene did it make that the king asked Velasquez to transfer it to canvas. The presence of the royal pair can be seen in the reflection in the mirror at the end of the room. With such realism was the picture painted that the French critic Gautier wrote, "So complete is the illusion that, standing

A MASTERLY PAINTER OF SUNNY SPAIN



So consummate an artist was Velasquez that Ruskin was moved to give this opinion of him: "Everything Velasquez does may be taken as absolutely right by the student."

in front of "Las Meñinas," one is tempted to ask, "Where is the picture?"

In this work the artist has included himself executing the portraits of the king and queen which he was painting when he was interrupted. The little princess is the centre of the scene, but the whole group is taken in with a single glance. The artist includes in the picture only as much detail as the eye is capable of embracing at a single glance.

The light streams through the window and permeates the whole room, enveloping the whole of the figures and not leaving one side dark.

This is, indeed, the chief characteristic of Velasquez—his power of rendering light. He recognized that the nearer to the eye the object is the whiter is the light. Hence he discovered a new kind of perspective—the perspective of light. The perspective of size had, of course, been discovered long before, but it is Velasquez' use of light which gives to his pictures their wonderful depth and vividness. Any other painter, dealing with the same subject, would have succeeded only in making his figures appear crowded.

It will be noticed that in the "Maids of Honour" Velasquez appears with the red cross of Santiago on his breast, and the story goes that it was painted on by the king himself. This, however, is doubtful, as it was only in 1659 that he received the honour, while the picture was painted in 1656. The honour was the equivalent of knighthood, though it was held much higher than is that distinction to-day.

Overcoming a Difficulty

It was necessary that the lineage of the recipient should be pure on both sides. This, fortunately for Velasquez, was the case. But it was also necessary that he should not be employed in any kind of trade, and this difficulty was overcome by declaring that he was painter to the king and that he did not sell any of his pictures.

On the 26th June, 1660, Velasquez returned to Madrid from the Island of Pheasants, where he had been decorating the Spanish pavilion for the marriage ceremony of Maria Theresa with Louis XIV of France. A month later he was taken ill with fever, and on the 6th August he passed away, to be followed a week later by his devoted wife. He was buried in the church of San Juan, which was destroyed by the French in 1811.

It may seem strange at first that the appreciation of the work of so great a master did not last for many years, but we must remember that at the time of his death Spain was already beginning to decay. It is to this very want of popular appreciation that his pictures escaped the French during the Peninsular War. It was not until 1828 that Sir David Wilkie wrote that he found himself in the presence of a new power in art.

[See Lives by Sir W. Stirling-Maxwell (1855), Sir Walter Armstrong (1898), and A. F. Calvert and C. G. Hartley (1908).]

WOMEN RULERS of ENGLAND

The Eventful Reigns of Mary I and Mary II, Elizabeth, and Anne, the Only Women Occupants of the Throne of England Prior to the Accession of Queen Victoria

IT was on the 18th February, 1516, at Greenwich Palace, that Mary, the first queen regnant of England, was born. The daughter of Henry VIII and Catherine of Aragon, the baby princess was baptized with great pomp and ceremony in the monastery adjoining Greenwich Palace. Cardinal Wolsey was her godfather and Princess Catherine Plantagenet (daughter of Edward IV) a god-mother.

The young princess was early regarded by her father, not only as his probable successor to the throne, but also as a definite pawn in the game of political intrigue abroad, at which His Majesty was so great an adept.

England's two great continental rivals during the reign of Henry VIII were France and Spain, and the king made resolute attempts during his daughter's childhood to arrange an alliance on her behalf with one of these countries. Indeed, at the tender age of two Princess Mary was actually betrothed to the infant son of the King of France.

This engagement, however, lasted but a brief period, for less than twelve months later Henry VIII, having decided that Spain was of more importance to England than France, cancelled his arrangement with the French king, and negotiated an alliance for his baby daughter with the young Emperor, Charles V. This second betrothal continued for nearly three years. The Emperor Charles, however, desired that his future bride should be brought up in his own country, but to this King Henry would not agree, and in 1526 it was Isabella of Portugal who became Charles's wife.

Meantime, it became desirable that the princess's importance in her own country should be emphasized, and at the age of ten a court of

her own was set up at Ludlow, and, though she was not actually created Princess of Wales, Mary enjoyed all the privileges attaching to that rank. Various other alliances for Her Royal Highness were discussed, but these proved abortive, chiefly because Henry VIII divorced Mary's mother, Catherine of Aragon, and consequently her child's legitimacy came into question.

CONSORT OF WILLIAM OF ORANGE



Mary II was queen regnant with William III, her husband and cousin. She was the daughter of James II and came to the throne in 1689. She reigned only for five years.

Among the king's subjects this divorce was exceedingly unpopular, for the people loved Princess Mary and wished to see her inherit the throne on the death of her father. Through the troublous three years of the divorce proceedings Mary stood loyally by her mother, but, when King Henry married Anne Boleyn in 1533, Catherine wrote to her daughter and urged her to do nothing to offend her father, and from that time onwards the young girl seems to have done all in her power to preserve harmonious relations with the various women to whom her father successively gave the title of Queen of England.

Anne Boleyn was perhaps Mary's greatest enemy, and, after the execution of that ill-fated woman in 1536,

the position of the princess became less difficult. When a son was born to Anne's successor, Jane Seymour, Mary acted as his godmother. It was this son who, on the death of Henry VIII in 1547, succeeded him as King Edward VI.

Mary, who, when her half-brother Edward became King of England, was in her thirtieth year, at first remained on terms of harmony, not only with the young monarch, who was some twenty years younger than herself, but also with her half-sister Elizabeth, the daughter of her old enemy, Anne Boleyn, and future Queen of England.

Unhappily, however, religious differences between the king and herself arose, and when, in 1549, the Act of Uniformity, prohibiting the reading of Mass, was passed, Mary, who was an ardent Catholic, refused to obey the order. For the strength of her religious beliefs Mary suffered severely and lost much of her former popularity in the country. Indeed, when Edward VI died on the 6th July, 1553, leaving the princess as his obvious successor, there was a strong movement to disinherit her in favour of Lady Jane Grey.

Mary Proclaimed Queen

Mary, however, finally prevailed, and was proclaimed queen. The following year Her Majesty married Philip, heir to the Spanish throne, and son of that Emperor Charles to whom Mary had, as an infant, been betrothed.

This Spanish marriage found little favour in the eyes of her subjects, and doubtless contributed to the queen's increased unpopularity in the later years of her reign. The word persecution is always linked with the name of Mary I, yet she does not seem to have been either a wicked or a cruel woman. She had resolved to bring her people back to the old religion, and it was only when other means failed that she resorted to methods which she had been brought up to believe in.

Following the suppression of the Wyatt rebellion in 1554, Mary, after having had sixty ringleaders hanged as a public example, proclaimed a general pardon. Lady Jane Grey would not have lost her head on the block had it not been for the repeated efforts of her supporters to capture the throne on Lady Jane's behalf at the expense of Queen Mary herself; and though it was constantly urged on Her Majesty that the execution of her half-sister, Elizabeth, would be nothing more than a prudent precaution to ensure her own position, this was an act to which Mary steadfastly refused her consent.

Her Solicitude for the Succession

Indeed, when the queen lay dying, her thoughts were all of how she could best secure the peaceful succession of Elizabeth to the throne, and almost her last act was to send her personal jewels to her half-sister, with instructions to pay her debts and uphold the true religion. On the 17th November, 1558, Queen Mary passed peacefully away, after a troubled and unhappy life, which had lasted but forty-two years.

Elizabeth, the virgin Queen of England, who succeeded to the throne in 1558, was born at Greenwich on the 7th September, 1533. She was the daughter of Henry VIII and Anne Boleyn, whom that monarch had married after having divorced Catherine of Aragon.

Elizabeth's strength of character, as well as her undoubted powers of dissimulation, may well be attributed to her chequered career in the days before she became queen. At one time she was flattered and courted as the presumed successor of Mary, and yet again she was treated by the latter as a disloyal and dangerous rebel. She was, indeed, on more than one occasion, in danger of losing her head.

There has been much speculation, both on the part of contemporary writers and later historians, as to why Elizabeth never married, and two distinct theories have been advanced. Some people suggest that Her Majesty's imperious disposition could not brook the idea of a divided sovereignty, and that she preferred the undisputed possession of her throne to the joys of domesticity. Others assert that the sentimental attachment which undoubtedly existed between Thomas Seymour and Elizabeth when the princess was no more than fifteen years of age was responsible for her determination to remain single.

Seymour Proposes for Elizabeth's Hand

Elizabeth was only thirteen when her father Henry VIII, died, having appointed Sir Thomas Seymour one of the advisory council to the executors to whom the government of the country was to be entrusted during the minority of his son Edward. About a month later Seymour was created Baron Seymour of Sudeley and made Lord High Admiral, and it was then that he proposed formally for the hand of the young princess. In spite of the affection in which she held Seymour, Elizabeth refused to sacrifice her freedom, and shortly afterwards the admiral consoled himself by marrying the queen dowager.

After her stepmother's death, in 1548, the position of Elizabeth became one of exceeding difficulty. The eyes of the nation were upon her, for she was already regarded as a possible rival to her half-sister, Mary, in the matter of succession to the throne, and the attentions which Seymour recommenced to shower on the princess were viewed with a great deal of suspicion in many quarters. Seymour was ultimately arrested and executed in 1549, and thenceforward Elizabeth's position was less perilous, though on more than one occasion she was made a prisoner of state.

Imprisons the Catholic Bishops

The country as a whole, however, had grown restive under the rule of their Catholic queen, and when at the age of twenty-five Elizabeth ascended the throne she had the good will of the nation with her. One of Elizabeth's first acts as sovereign was to imprison the Catholic bishops in the Tower, pending their taking the formal oath of supremacy.

In the early years of her reign Elizabeth's chief preoccupation was the relations existing between Scotland and France. These, though outwardly cordial, seemed to the astute queen to foretell future trouble. When James V of Scotland died in 1542 he was succeeded by his only daughter, Mary Stuart, who on her marriage with the Dauphin of France became prospective queen consort of that country.

In April, 1559, a peace treaty between England, Scotland, and France was signed at Cateau Cambresis, but Elizabeth with a foresight and sagacity beyond her years realized that a contest was coming in which the opponents would be not so much the inhabitants of different countries as the acknowledged supporters of different religions.

Supports the Protestants

Unhesitatingly the Queen of England gave her official support to the Protestant parties in the various countries and in July 1560, a treaty was signed at Edinburgh, in accordance with which Mary Stuart was to abandon all pretensions to the throne of England. Mary Stuart, however, was destined to give Elizabeth many more anxious moments before her tragic death at Fotheringhay in 1587.

After the death of Mary's husband Francis II civil war broke out in France and in this struggle Elizabeth ill advisedly meddled, in response to the pleadings of the French Calvinistic party. As the price of her aid Havre and Dieppe were surrendered to England, but, when the internal affairs of France had been adjusted Elizabeth found that she could only hope to retain these ports by undertaking a continental campaign and Havre was handed back to the French in 1563.

Following this episode with France Elizabeth seems to have definitely regarded Mary Stuart as an enemy who was likely to attempt to wrest the crown from her. She therefore decided to find a suitable husband for this possible rival, and it was through the queen's negotiations that Mary married Darnley on the 29th July 1565.

For Elizabeth there followed two comparatively peaceful years but at the end of that period trouble once more arose. Darnley was murdered and almost immediately Mary married the Earl of Bothwell a man antagonistic

to the queen, and who was believed to have been concerned in the death of Darnley. The following year saw Mary Stuart the prisoner of the English queen, and thus began her long period of captivity lasting for nearly twenty years, and terminating only with the execution of the unfortunate Scottish queen.

QUEEN ELIZABETH REVIEWING HER TROOPS



When England was threatened by the Spanish Armada, Elizabeth displayed a fine appreciation of her duties as queen. She rode down to Tilbury and reviewed her troops, saying that she would be their general.

In 1570 the great Catholic rebellion broke out in the north of England, but as the best brains of leadership were on the Protestant side the struggle was rather an inconvenience than a menace to Elizabeth. It was in April, 1571 that the Queen of England now in her thirty-eighth year, contemplated an alliance with the young Duke of Anjou brother of Charles of France. Anjou, however, soon became convinced that

Elizabeth meant nothing serious, and when he withdrew from the negotiations in July, 1571, his younger brother, the Duke d'Alençon, was offered as a substitute.

Francis, Duke d'Alençon, was a hideous dwarf, scarred with the marks of smallpox, yet he captivated the fancy of England's queen, and for twelve long years—indeed, until his death—she played with the idea of marrying this unprepossessing Frenchman.

Elizabeth's Later Unpopularity

In the latter years of her reign Elizabeth became unpopular both at home and abroad, chiefly on account of her religious convictions. She was bitterly blamed by the nation for allowing Sir Francis Drake to make the attacks on the Spanish ports in 1585 and 1586, which resulted in 1588 in the sailing of the Spanish Armada.

Throughout the conduct of this campaign Elizabeth seems to have behaved in a weak and short-sighted manner, and the fact that England ultimately triumphed over her enemy was felt to be due to the patriotism and self-sacrifice of the country rather than to the wisdom of its ruler. At the conclusion of the war with Spain Elizabeth was fifty-five years of age, and from then until her death in 1603 her life, both as woman and queen, was comparatively lacking in important events.

During her reign she always obstinately refused to name her successor to the crown, and it was not until in her seventieth year, when she lay dying, that she signified her desire that James VI of Scotland should take her place upon the throne.

Nearly ninety years elapsed after Elizabeth's death before Mary, the daughter of James II and his first wife, Anne Hyde, became Queen of England, following the abdication of her father. As Mary II she reigned conjointly with her husband, William of Orange.

Lukewarm Welcome to Mary

Born at St. James's Palace on the 30th April, 1662, Mary began life in an inauspicious manner, for, by reason of her sex, her arrival pleased nobody: and when, some fifteen months later, her mother gave birth to a son, Mary's importance entirely disappeared for the time being.

Her younger sister, Anne, who was also destined to become Queen of England, on the death of William of Orange, was born on the 6th February, 1665, and the two young princesses were brought up together and educated in the Protestant faith.

On the death of her brother in 1671, Princess Mary became heiress-presumptive to the throne, and the question of the disposal of her hand in marriage became a matter of national importance. William of Orange was proposed

as a suitor when the princess was little more than ten years of age, but these negotiations were interrupted by the Dutch war, which broke out in 1672, and for a time the idea of an alliance with France was favoured.

In 1677 the negotiations with Holland were renewed, and the Prince of Orange visited the English Court. He made a formal request for the hand of the princess, and the marriage was solemnized on the 4th November. Mary's marriage was followed, in 1683, by that of her sister, Anne, who became the wife of Prince George of Denmark, and this second alliance was generally regarded in political circles as a counter-move to the Dutch match.

Her Life in Holland

Mary's life in the country of her adoption seems to have been unhappy from the start, for, though she always identified herself completely with the policy of her husband, she never enjoyed either his confidence or his affection. With her sister Anne she carried on a regular correspondence, but from her father she became estranged, and after His Majesty's unsuccessful attempts to convince the people of both England and Holland that a son had been born who would succeed him as king, Mary regarded James's dethronement by her husband as inevitable, and thenceforward the rupture was complete.

When William of Orange set forth on his expedition to win the crown of England, Mary remained behind in Holland, but joined her husband in London in February, 1689, when the couple were immediately proclaimed king and queen.

Anne, who had given her assent to the settlement of the crown on the Prince and Princess of Orange, now lived for some years in complete retirement, and unhappily the relations between the sisters grew less cordial as the years passed.

Throughout her reign as Queen of England Mary's life was exceedingly difficult, for William was of an overbearing and jealous temperament, and sought to throw on his wife all the troubles of statesmanship, reserving for himself the glories of the position of monarch. So we find Mary ruling the country to the best of her ability during William's absences abroad, and meekly accepting the position of consort when he was in England.

Marlborough Shorn of His Appointments

The Duke of Marlborough's intrigues with the dethroned king added greatly to the trials that beset the new sovereigns, and when, in 1692, that statesman's disloyalty being too obvious to disregard any longer, he was deprived of his privileges and appointments, Anne, angry at this treatment of her favourite, took the opportunity to make a definite break with her sister.

ELIZABETH SIGNING MARY STUART'S DEATH-WARRANT



Among the chief events associated with the reign of Elizabeth, which extended over forty-five years, were the defeat of the powerful Spanish Armada, the opening up of British colonies, the rise of a great new literature chiefly ornamented by Shakespeare, and the execution of Mary Queen of Scots. Mary suffered nearly twenty years imprisonment before her death on the block at Fotheringay Castle.

For biographies not included in the Groups see detailed Index'

Thus in the last years of her life Mary found herself estranged from her family, and she consoled herself for their defection by her increased care and attention to her husband's affairs. Barely two years after her quarrel with her sister Anne, Mary contracted smallpox and died on the 28th December, 1694.

Anne ascended the throne in 1702, on the death of King William III. It was an unpropitious time for a new monarch to take over the reins of government, for the country was on the verge of war with France. Indeed, England declared her hostile intentions only a few days after the coronation of the new queen

SUCCESSOR OF DUTCH WILLIAM



Queen Anne, who occupied the throne of England for twelve years. Her accession followed on the death of William III in 1702. She was the last of the Stuart dynasty.

Anne's reign is regarded as one of the most glorious in history, and, though this is doubtless due at least as much to Marlborough's victories over the French and to the termination of the War of the Spanish Succession as to any personal achievements on the part of the queen herself, she was certainly an influence for good in the country.

When the news of the tremendous triumph at Blenheim came, the queen was delighted, and when Her Majesty attended the thanksgiving service for this victory at St. Paul's, she honoured the Duchess of Marlborough by having her alone with her in the royal carriage. Indeed, for a time, Anne could not do enough for Marlborough and his wife. It was at Her Majesty's personal expense that a palace bearing the name of Blenheim was constructed in the royal manor of Woodstock, which the queen had expressed a wish should be bestowed on the duke and his heirs for ever. This popu-

larity, however, was not destined to last, for only seven years later Anne, at a council meeting on the 31st December, 1711, ordered that her former favourite be deprived of all his offices and appointments.

It was about this time that Anne's health first gave cause for serious preoccupation. The queen had previously suffered from gout, and early in 1712 she requested that certain important debates in the House of Lords be adjourned, as a severe attack of gout prevented Her Majesty from being able to attend.

The Treaty of Utrecht

Meantime, negotiations for establishing peace between England and France had been proceeding. In August, 1712, a truce was agreed to, and by the end of the year it became apparent that the anti-peace party in England had no longer any substantial following. In March, 1713, a treaty of peace between these two countries was signed at Utrecht. The queen, by her staunch support of the Tory party, had been largely responsible for the conclusion of peace, and thenceforward, despite her failing health, Anne became a figure of increasing importance in the eyes of politicians both at home and abroad.

In 1713 widespread efforts were made for the restoration of the Jacobite dynasty, and the queen's continued ill-health excited a deal of speculation among the Jacobites. On Christmas Eve Anne became seriously ill, and the Whigs caused news of her death to be circulated in anti-royalist circles. When, however, at the opening of Parliament in the following March, the queen appeared in the House of Lords, having been carried in a chair by her attendants, a severe blow was struck at the Jacobite party. Although the question of the succession continued actively to occupy the minds of the politicians, the last months of Anne's reign were marked by an absence of active intrigue.

Her Interest in Church Matters

Throughout her reign Anne took the greatest possible interest, not only in affairs of state, but also in the individual welfare of her courtiers and subjects. But it was in Church matters that the queen showed her greatest zeal, for not only was she a deeply religious woman, but she held the strongest possible views on the way in which ecclesiastical duties should be carried out. In nothing did Anne so forcibly demonstrate her obstinacy and strength as in her determination to be the sole distributor of official patronage and preferment in all matters relating to the Church.

During the last months of her reign Anne's health became increasingly delicate, and she succumbed to an attack of dropsy on the 1st August, 1714.

A GERMAN COMPOSER of MELODIC BEAUTY

Mendelssohn's Short and Happy Journey through Life, in Which He Kept His Boy's Heart and Created Music that Still Charms by its Haunting Sweetness

JAKOB LUDWIG FELIX MENDELSSOHN-BARTHOLDY, well known to all the world as "Mendelssohn," was born on the 3rd February, 1809, at 41 the Grosse Michaelisstrasse, Hamburg. The Mendelssohn family, a race of highly talented men, can be traced back to a Jewish scribe named Mendel, who lived at Dessau about the opening of the eighteenth century. This man's son, Moses Mendelssohn, displayed an amazing aptitude for learning, and at the age of five years was placed in the care of Rabbi Fränkel, who soon afterwards removed to Berlin.

Under Fränkel's care the boy grew up to be one of the most learned men in Europe, and, though he never became a Rabbi himself, he was respected far and wide as a philosopher. He died in 1786, leaving three sons, one of whom, Abraham, married Leah Bartholdy and became the father of the great musician. Abraham Mendelssohn entered the world of commerce, and established himself at Hamburg. He flourished considerably, and at the time of Felix's birth in 1809 he had become a man of considerable standing among his fellow merchants.

During the spring of 1811 Napoleon's troops occupied Hamburg, and Abraham Mendelssohn, who had offended a French officer, was forced to fly from the city by night, taking with him his wife, his little son, and his two infant daughters. They found refuge at Berlin, where a home was established in a great square ugly house on the Neue Promenade. Here Abraham's fourth and last child, Paul, was born on the 30th October, 1813, and here Felix passed his childhood.

Soon after this migration to Berlin, Abraham Mendelssohn had his children baptized into the Lutheran Church. He probably did this owing to the disabilities under which Jews then laboured in Germany. A few years

afterwards Abraham and his wife were also baptized, and took the name "Bartholdy" in addition to their own. They were now completely cut off from the Jewish community, who looked on them as renegades; and Felix grew up and was educated in all respects as a Christian child.

Both Felix's parents were well educated and cultured, his mother, in particular, being an excellent musician. When her son was three years old, Frau Mendelssohn began to give him music lessons, which at first lasted only for five minutes, so that the little boy might not be unduly wearied. Felix soon clamoured for more and longer lessons, as he found greater pleasure in the piano than in any of his toys or games. During 1816 the whole family visited Paris for some months, and Felix and his elder sister, Fanny, were for a time placed under Madame Bigot, a then famous piano teacher, with whom they both made great strides. On their return to Berlin, brother and sister began a thorough musical education. They studied

THE COMPOSER IN BOYHOOD



The great German composer when twelve years old. At this tender age he had already produced two operettas and upwards of sixty other pieces of music.

the piano, the violin, harmony, and composition with the best masters of the day, while their general education proceeded on the same comprehensive scale.

This intensive culture produced such results that in 1818 Felix made his first appearance in public. He played the piano part in a trio, and acquitted himself manfully. The next year he entered the Berlin Singakademie as an alto, and henceforward there was never any doubt that a distinguished musical career lay before him. He studied, he composed, he practised, with unflagging zeal, and with such success that by the end of 1821 he had written two operettas and more than sixty other distinct pieces of music.

During 1821 Felix was taken to Weimar by a friend of Goethe's, who thought that this prodigy might interest the great poet. As

his friend anticipated, Goethe was captivated, and Felix and he became fast friends. The first man of letters of Europe and the boy musician spent many happy hours together, conversing almost as equals, and when Felix played to him by the hour, the author of "Faust" was delighted beyond measure. Since Goethe was notoriously difficult to please, this conquest set, as it were, a *cachet* upon Mendelssohn. Henceforward everyone was prepared to accept him as a genius—for had not Goethe approved of him?

The Famous "Gartenhaus"

In 1825 the Mendelssohns moved to a large mansion, No. 3 Leipziger Strasse, which was surrounded by a spacious garden, in which stood the now famous "Gartenhaus" (garden-house). The date of this removal may be taken as marking off Mendelssohn's youth and childhood from his maturity. He was only sixteen when it occurred, but he had been accustomed to mix in the best musical society of Berlin since his childhood, and he matured early.

The "Gartenhaus" was a large building, with a spacious hall, capable of holding several hundred persons; and here each Sunday Abraham Mendelssohn and his wife arranged musical parties. Professor Zelter, Rossini, Moscheles, Meyerbeer, Kalkbrenner, Weber, and many other famous musicians attended these gatherings from time to time.

From these parties, Felix received an important part of his musical education, for here he was in the heart of the musical world, in touch with all its foremost intellects. Moscheles, in particular, was a close friend of the family's, and he was persuaded to give Felix some lessons. In his diary he wrote: "To-day . . . I gave Felix his first lesson; but not a moment could I conceal from myself the fact that I was with my master, not with my pupil."

Discovers the Charms of Shakespeare

Soon after the move to the Leipziger Strasse Mendelssohn discovered Shakespeare, and at once succumbed to his fascination. He and his sister Fanny were especially attracted by *A Midsummer Night's Dream*, and as a result Mendelssohn began to compose his music to that play—his first mature and sustained work. The overture was first performed at the "Gartenhaus" by an amateur orchestra during the autumn of 1826, and was received with enthusiasm by an audience of accomplished musicians, most of them professionals of high standing.

During the next three years Mendelssohn was busy attending the courses at Berlin University, although he managed to find time for a good deal of composition as well. In

April, 1829, he paid his first visit to London with his father. This was no mere sight-seeing jaunt, for his father, having determined to allow Felix to adopt a musician's career, took him to England to see if he could find an opening there suited to his talents.

(On the 25th May Mendelssohn made his debut at a concert of the Philharmonic Society, where he conducted his own symphony in C minor (No. 1). He was received with an enthusiasm which passed even his wildest expectations, and when he conducted again a few days later, he was positively overwhelmed by the audience. He was received everywhere—petted, lionized, and made much of.

Till the end of the season he was in London, conducting his *Midsummer Night's Dream* overture at a concert on the 24th June. July and August were passed in touring the west of Scotland, a journey which is commemorated by the well-known *Hebrides* concert overture. He remained in London until May, 1830, when, in accordance with his father's plan of experimental travel, he left with Italy as his ultimate goal.

Working in the Eternal City

Charming and delighting everyone he met, Mendelssohn travelled to Rome by easy stages, by way of Vienna, Venice, and Florence. By the beginning of November he settled down for a winter of strenuous hard work in the Eternal City. Each morning he studied and composed, while every afternoon was made memorable by visits to all the manifold treasures of the Vatican, St. Peter's, or the Borghese Gallery. He thus spent a most profitable six months, widening his outlook and strengthening his musical equipment. All the spoiling he had received had not affected Mendelssohn, and he remained just as much in earnest about his musical career.

Leaving Rome in the spring, he made a tour through northern Italy and Switzerland, and finally turned his face towards London, where he arrived on the 23rd April, 1832. He established himself in his former rooms at No. 103 Great Portland Street, to which all his old friends flocked. His compositions were now being played at London concerts as a matter of course, and Mendelssohn found a reputation as a composer ready made for him on his arrival. His cup of happiness was full.

Enjoying His Popularity

He threw himself into the part that the fashionable world expected of him with tremendous gusto, genuinely touched by all the nice things people said about him, genuinely moved by the music he conducted—especially when it happened to be of his own composition. Other musicians, Chopin and Liszt, for example,

have achieved just as complete successes as he did, but about Mendelssohn's youthful triumphs there is a spontaneity, an innocence, which they lacked. Great ladies might pay him court, but he remained unspoiled and wholly himself.

So greatly did he enjoy himself in England that, except for a few visits to the Continent, Mendelssohn remained in this country until September, 1833, when he left to take up his duties as musical director at Düsseldorf, a post to which he had been appointed earlier in the year. He found the music of Düsseldorf in an extremely wretched condition, and at once started reorganizing it, both in the churches and at the opera.

When Mendelssohn came to conduct for the first time at the opera-house, the performance of Mozart's *Don Giovanni* was drowned in a babel of boos and catcalls. The young musical director, therefore, refused to proceed with any of his duties until a full and ample apology was forthcoming from the organizers of this demonstration. Mendelssohn's uncompromising attitude won the day, and the ringleaders apologized abjectly. The performances at the opera were then continued, and thereafter proved eminently successful.

His engagement at Düsseldorf was for three years, yet, before he had served two of them, the management of the world-famous Gewandhaus concerts at Leipzig, approached him, with a view to his becoming their musical director. This position was the most distinguished in the German musical world, and the invitation was conveyed in the most flattering terms. Mendelssohn hesitated, delayed—

accepted. He left Düsseldorf in the summer of 1835, and by September he was hard at work in his new post, rehearsing for the first concert of the winter season.

At Leipzig Mendelssohn found a congenial and sympathetic atmosphere. He soon established himself in a delightful little house, and proceeded to throw himself heart and soul into his work and his amusements. "When I first

THE PROPHET AWAKENED BY THE ANGEL OF THE LORD



"Elijah in the Wilderness," after the painting by Lord Leighton, P.R.A. Here Lord Leighton shows an incident in the life of the prophet which Mendelssohn depicts so vividly in his famous oratorio. (Reproduced by permission from the original in the Walker Art Gallery, Liverpool)

came to Leipzig," he said, "I thought I was in Paradise." Rehearsals went forward admirably. Moscheles and other old friends came to visit him, and new ones flocked around him. All too soon the day of the opening concert arrived, and the new conductor took up his baton, not without nervousness. But the programme went through without a hitch. Mendelssohn acquitted himself to the satisfaction of everyone, including himself.

The succeeding concerts repeated and eclipsed

the success of the first. All the world said that a more highly successful season could not be remembered. Mendelssohn had established a reputation as the most accomplished and subtle conductor in Europe. Apparently he could use an orchestra as easily as he played a piano, bringing out new nuances in well-known music and presenting new works with a freshness and brilliance that charmed and astonished his audiences.

Falls in Love with Cécile

This concert season was marked for Mendelssohn by two important private events. His father died, and for the time being everything seemed dull and purposeless for him. A few months later he met and fell violently in love with a Mdlle. Cécile Jeanrenaud, the daughter of a pastor of the French Reformed Church. On the 9th September, 1836, he proposed and was accepted. "I have just been accepted by Cécile Jeanrenaud," he wrote to his mother. "My head is quite giddy from the events of the day. . . . I feel so rich and happy."

For three weeks he and his fiancée were left to enjoy one another's society. Then Mendelssohn had to return to his duties at Leipzig, for another concert season was near at hand. Inspired by his new-found happiness, the conductor made this second season at the Gewandhaus even more successful than the first. On the 16th March, 1837, the season at last ended, and Mendelssohn hastened to Frankfort, where Cécile lived. They were married twelve days later, and they spent a six weeks' honeymoon at Freiburg im Breisgau, the following two months being occupied in a round of visits. On the 24th August Mendelssohn left his wife with her mother, and set out on a professional visit to England.

Hurrying Back to His Wife

During the visit he renewed many friendships in London, and conducted his own magnificent oratorio, *St. Paul*, at the Birmingham festival. Although pressed to prolong his visit, he was all impatience to see his wife again, and by the 1st October he had joined her at Leipzig. He now took a larger house, and prepared for the approaching concert season. The next two years slipped by swiftly and happily for him. He was successful in all he attempted; he had a beautiful wife, a great reputation, comfortable means.

In 1842 Mendelssohn paid a visit of a month to London. During this stay he was twice commanded to appear before Queen Victoria and Prince Albert at Buckingham Palace. The royal couple were delighted with him beyond all measure. The prince himself played the organ turn and turn about with Mendelssohn, who also accompanied the queen while she sang two of his songs.

In the following year Mendelssohn realized his greatest ambition by establishing the conservatoire at Leipzig. A large legacy had been left to the town to be used for any public purpose, and the King of Saxony now augmented this sum, and directed that it should be applied to setting up a conservatoire. A portion of the Gewandhaus was temporarily allotted to the infant establishment, and during April classes began.

Mendelssohn and Robert Schumann were the first professors of composition and the piano, while Hauptmann, the most learned theorist in Europe, attended to harmony and counterpoint. There were only forty-two students at first, yet never has any musical institution had so brilliant a staff as these three professors.

Works for the King of Prussia

In addition to all the hard work entailed by this new venture, Mendelssohn was also busy composing. He was working at his *Elijah*, the greatest of his oratorios, and also at various compositions which the King of Prussia had specially commissioned from him.

This work for the Prussian Court grew and grew in volume. No sooner did Mendelssohn complete one work than two more would be demanded from him. He, therefore, gave up his house at Leipzig, and moved to Berlin, where he established himself with his wife in the great house on the Leipziger Strasse, leaving the Gewandhaus concerts under the temporary direction of Ferdinand Hiller. He passed the winter of 1843-44 busy on a series of works for the Berlin Cathedral.

The king desired him to prepare incidental music for the *Eumenides* of *Æschylus*, but this he refused to do, as, in his judgment, the task could never be carried out satisfactorily. Courtiers tortured this into a mere stubborn and pig-headed refusal to do as the king asked, and poor Mendelssohn was soon regarded with scant favour. His work for the Court had been growing increasingly onerous, and now his position in Berlin became insupportable.

Relieved of His Court Appointment

During 1844 he paid another triumphant visit to London, but on his return he found affairs at Berlin worse than they had ever been. He therefore petitioned to be allowed to retire from his wearisome post of composer to the Court, and this the king allowed him to do. His health had been adversely affected by the continual friction and squabbles of this Berlin period, so that he and his wife passed most of the year 1844 in complete rest at Frankfort. Early in 1845, vigorous once more in mind and body, he returned to his old position at Leipzig—and to happiness.

All his old friends welcomed his return.

The Gewandhaus orchestra improved wonderfully, the conservatoire began to hum with activity, the whole of Leipzig seemed to rejoice that Mendelssohn was back again. In teaching at his beloved conservatoire he now became more active than ever, taking entire charge of two piano classes and one class for composition.

As a teacher Mendelssohn was at his best. No trouble was too great for him to take, no matter too trivial for his earnest attention. The only thing that upset him was carelessness. He set great store by what could be learned from listening to informed and accomplished singing. "If you want to play with true feeling," ran his invariable advice, "you must listen to good singers. You will learn far more from them than from any players you are likely to meet with." All his students were devoted to him, for he was always just, kind, and—rarest of all virtues in a great musician—willing to own himself in the wrong when he made a mistake.

Jenny Lind

The season at the Gewandhaus during the winter of 1845-46 was an exceptionally brilliant one. Jenny Lind was specially engaged to sing at several concerts. She stayed with Mendelssohn, an old friend of hers, and sang his songs as they had never been sung before, the composer himself invariably accompanying her at the piano. The Gewandhaus orchestra, moreover, seemed to have reached a standard of excellence hitherto unapproached. On Easter Sunday, 1846, Jenny Lind and Mendelssohn both appeared at a final chamber concert. This was a doubly memorable occasion, for not only did the great songstress surpass herself, but it proved to be Mendelssohn's last public appearance at Leipzig.

In spite of all the engagements and labours of this busy winter, Mendelssohn had found time to continue his work on *Eljah*.

TO THE MEMORY OF A BELOVED MUSICIAN



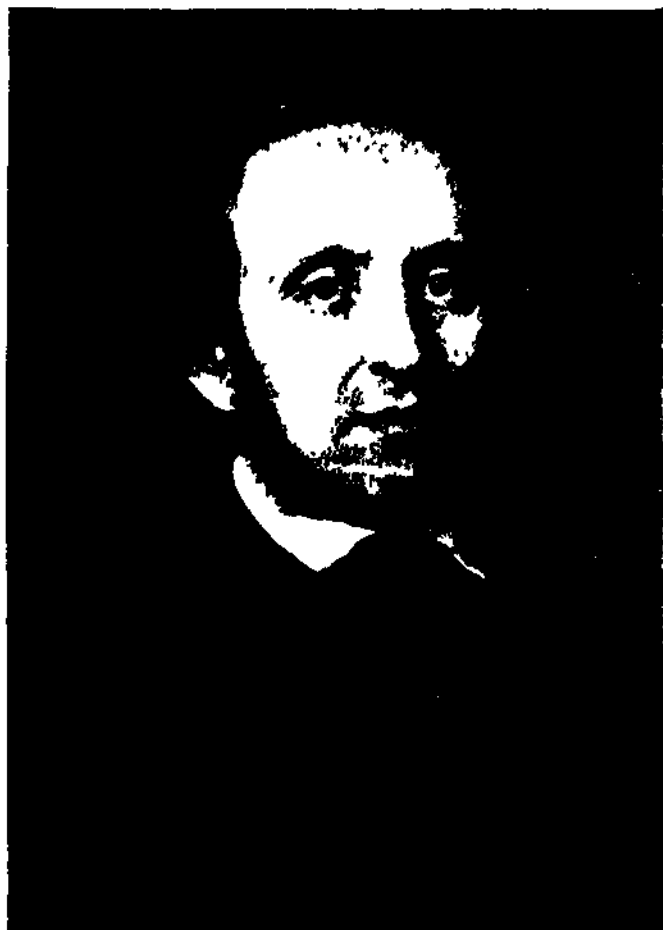
The Mendelssohn monument at Leipzig. This fine statue commemorates the great musician, who was so intimately connected with the city and who founded and was the first director of the Leipzig conservatoire. A great gentleman, as well as a great musician, Mendelssohn was loved by all.

which at last, in the spring of 1846, neared completion. During July, 1846, the whole work was dispatched to England for translation, as it had been written specially for this country. A month later the composer followed his manuscript, and on the 18th August he arrived in London for the ninth time.

He now set about holding rehearsals for a first performance of *Elijah*, and all that could

baton in hand, facing the cheering audience when the performance was over, he must have felt that here were adequate reward and appreciation for all the weariness and labour and anxiety that this mighty composition had cost him. Directly the Birmingham festival was over, he went to London, where he rested in complete quiet for a few days, and then returned to Leipzig.

A MASTER CREATOR OF SWEET MUSIC



The wonderful popularity of many of Mendelssohn's compositions, notably his oratorios, *Elijah* and *St. Paul*, and the *Midsummer Night's Dream* music, give him a right to occupy a foremost place among the world's composers. To Mendelssohn, too, we owe the rediscovery of Bach's choral works.

possibly be done to ensure a brilliant first performance was accomplished. So much laborious work compressed into so few days, however, told upon Mendelssohn's health, but he insisted on doing everything himself, with the result that he soon grew careworn, overtired, and nervous.

On the 26th August the first public performance took place at Birmingham, and few compositions have ever been received with such an outburst of enthusiasm. As he stood,

On the 14th May, 1847, Mendelssohn's beloved sister Fanny died suddenly. The shock of her death completely prostrated her brother, who never really recovered from it. His friends said that from that day onwards he never laughed again. All through the summer he continued ill in body and sick at heart, seeking everywhere a distraction he could not find. His visit to England had thoroughly overstrained him, and this blow now completed a breakdown of his nerves. During October he grew markedly worse, all hope of saving his life vanished, and on the 4th November, 1847, he died peacefully. He was buried beside his father and mother in Berlin.

Claims to Fame

As a composer Mendelssohn ranks with the greatest of his century, as the unfailing popularity of such things as the "Songs without Words," the *Midsummer Night's Dream* music, and *Elijah* bears witness. He has a further claim to fame, for it is to Mendelssohn that we owe the rediscovery of the choral works of Bach, after they had lain a century forgotten. Many features of the designs used by Mendelssohn for his oratorios were inspired by Bach's choral works. Mendelssohn took Bach's method of counterpoint and on that modelled his own, combining with it a free development of the sonata form, not unlike that which Beethoven founded on the lines prescribed by Haydn. Though basing himself on such conservative principles, Mendelssohn succeeded in evolving an entirely original style which was essentially his own.

Mendelssohn was the most charming of men. Much of the boy remained in him to the end. He was honourable, scrupulous, and fair-minded, not only a great musician, but a great gentleman.

[See "Mendelssohn," by W. S. Rockstro (Great Musicians Series), (1884).]

MEN Who SAVED MILLIONS of LIVES

The Diligent Investigations and Incalculably Valuable Discoveries of Edward Jenner, Robert Koch, and Elie Metchnikoff, who Spent their Lives in Conquering Disease

RIDING their horses close together, and with slackened bridles, along the road between Gloucester and Bristol, two young men were engaged in earnest talk.

"Gardner," said one of them, who was smartly dressed in a blue coat with yellow buttons and carried a handsome silver-topped riding whip, "I have entrusted a most important matter to you, which I firmly believe will prove of essential benefit to the human race. I know you, and should not wish what I have stated to be brought into conversation, for should anything untoward turn up in my experiments I should be made, particularly by my medical brethren, the subject of ridicule—for I am the mark they all shoot at."

The speaker was Dr. Edward Jenner, at that time a general practitioner in a small country town and quite unknown to the world. The secret which he confided to his friend was that he believed it possible to prevent the disease of smallpox by inoculation with the virus of cowpox, a disease then very prevalent among cattle in the west of England.

This was the first occasion on which Jenner spoke of his discovery to anybody not connected with his profession, and the fact that he did so is evidence that his sensitive nature had been deeply wounded by the unsympathetic attitude of his brother physicians. Most of them assured him that further efforts could only end in disappointment. Just as the poet Keats was told by the critics to "go back to his gallipots," so Jenner received plain hints that he could better employ his time looking after his patients and studying the habits of cuckoos and hedge-

There were some, of course, who realized that the debonair young doctor was on the track of an epoch-making discovery. But the majority of Jenner's critics did not even pay him the compliment of considering his evidence. They condemned the mere idea of vaccination as at once ridiculous and dangerous. It was suffi-

cient for these older physicians that Jenner was young and inexperienced and therefore bound to be wrong.

Nobody realized his liability to err more than Jenner himself. He knew that what he had in mind at the time was the merest glimpse of the truth derived from a chance remark, which, if it had been withheld, might have meant many years of groping in the dark; and he also knew that much study and careful experiment would be necessary before he could develop his idea.

DISCOVERER OF VACCINATION



The English physician, Edward Jenner, who claims fame as the founder of the system of vaccination for the alleviation of smallpox.

Youth and error are not always synonymous. Marconi was barely twenty-two when he made his wireless discoveries; Newton had thought out his doctrine of light and colour when he was twenty; Bacon wrote his "Temporis Partus Maximus" before he had reached that age; and Jenner was still younger when he first perceived the truth that delivered humanity from a scourge that had ravaged it for over 800 years.

Edward Jenner was born at Berkeley, in Gloucestershire, on the 17th May, 1749. His father, who was rector of the parish, died three years later, leaving Edward to the care of a much older brother. He was educated at Wotton-under-Edge and Cirencester. At

nine years he developed independently a taste for natural history which led him to separate himself from his school companions and spend many hours searching for the fossils, in which the neighbourhood of Cirencester abounds, and collecting the nests of the dormouse.

His interest in the habits and history of animals, however, quickly gave place to a passion for dissection and analysis of them. Jenner was never a natural historian in the ordinary sense of the word. Some of his observations of the habits of cuckoos, for example, were singularly misguided. But in the study of the minute and delicate organisms of small creatures he displayed a remarkably precocious skill.

Against the wishes of the brother who was also a father to him, and who wanted him to

enter the Church, Jenner decided upon a medical career. He was sent to study under the guidance of Daniel Ludlow, a surgeon of Sodbury, near Bristol, and it was here that the seemingly trivial incident occurred which was of such importance to the young student.

One day a young woman came to the surgery for medical advice. The matter being slight, Jenner was allowed to undertake the consultation. During the course of conversation, the subject of smallpox was mentioned, and the young woman volunteered a statement.

"I cannot take that disease," she said, "for I have had cowpox."

Matter of Common Knowledge

Jenner's attention was instantly arrested by this circumstance, and he learned with further astonishment and interest that what his patient told him was a matter of common knowledge among the dairymaids in the district. Many of them who had contracted the mild complaint of cowpox through milking diseased cows, and had afterwards come into close contact with persons suffering from smallpox, found that they escaped contagion, although they fully expected to fall victims to the dread disease.

Superstition does not often come to the aid of science, but here was a case where the gossip of peasants led directly to a great discovery. For years it had been known by quite ignorant people that one form of disease could immunize a person from another and worse one. Yet no medical man had apparently heard of the fact or, having heard of it, thought it worthy of serious investigation.

Jenner's mind, however, was well prepared for the reception of that interesting little bit of information. His very youthfulness made him less sceptical of what an older man, hidebound with pedantic notions, would probably have dismissed as "an old wives' tale." His alert mind, albeit untrained and unlearned, instantly saw the possibility that a scientific explanation for what the dairymaids accepted as a natural course of events might lead to consequences of unlimited value to the human race.

Joy in Overcoming Disease

"The joy I felt," he wrote, "at the prospect of being the instrument destined to take away from the world one of its greatest calamities, blended with the fond hope of enjoying independence and domestic peace and happiness, was often so excessive that, in pursuing my favourite subject among the meadows, I have sometimes found myself in a kind of reverie. It is pleasant to me to recollect that these reflections always ended in devout acknowledgments to that Being from whom this and all other mercies flow."

When he was twenty-one Jenner came to

London and continued his education under the guidance of John Hunter, one of the most celebrated physicians and scientists of the age. The eager pupil lost no time in explaining to his master the great hope of his career. He received kindly encouragement. Hunter advised him to be "patient and accurate." Above all, experiment was necessary, and both master and pupil fully realized that this would present the very greatest difficulty.

Arranging Zoological Specimens

After two years hard study Jenner was appointed, through the recommendation of John Hunter, to prepare and arrange the valuable zoological specimens collected during Captain Cook's first voyage in 1771. He carried out this work so well that his employer, Sir Joseph Banks, offered him the appointment of naturalist to the second expedition. But Jenner declined. He had already decided upon the main object of his future studies, and he was anxious to settle down quietly and devote his spare time to the working out of his discovery.

In 1773 he returned to his native town of Berkeley and began to practise as a physician and surgeon. He succeeded almost at once, and rapidly became a well-known figure in the town on account both of his social and his intellectual gifts. Nobody guessed that the dandified doctor riding on horseback to see his patients, and seemingly as gay and lighthearted as his appearance suggested, was inwardly deeply troubled with a secret that might enable him to "stand between the dead and the living" and wipe out a terrible plague, and that he was continually haunted by dread of failure and its consequences. Every case of smallpox that came to his knowledge affected him like a personal reproach.

Experiments on Eels and Hedgehogs

As though to seek relief from his intense preoccupation, and to escape from the sense of responsibility that weighed upon him, Jenner flung himself into a variety of pursuits, and he even indulged in the writing of light verse. From time to time Hunter wrote to him, urging the carrying out of certain obscure experiments upon eels and hedgehogs and earth-worms. The elder man seemed puzzled at times by Jenner's apparent dilatoriness in carrying out these experiments, but the truth was that Jenner's most vital energies were all the while engaged upon working out the great problem that held the foremost place in his mind.

He found time, however, to establish a local medical society, to the members of which he read valuable papers on rheumatic affections of the heart, ophthalmia, and cowpox. Upon the last-mentioned subject, which was so near to his heart, he was as yet unable to deliver any

PROOF OF HIS PROFOUND FAITH IN INOCULATION



Jenner's implicit faith in the efficacy of his great discovery is exemplified by this statue which depicts the famous physician inoculating his own son. His ceaseless investigations and exhaustive experiments were at length rewarded, and he was able to convince the medical profession that his system of vaccination was all that he claimed for it. The new method spread far and wide. The first child vaccinated in Russia was called Vaccinov and was educated at the public expense.

profound new truth. His opportunities for making experiments were very few, and until he could gather real evidence he had nothing to work upon but a haunting intuition derived from hearsay.

It was not until 1780, more than ten years after his first glimpse of the truth, that Jenner was able, after much perplexing inquiry and study, to take some few tentative steps towards the scientific elucidation of what many doctors and men of science thought to be merely a coincidence in nature.

Theoretically, Jenner believed that cowpox and smallpox were but different varieties of the

TOMB OF A GREAT BENEFACTOR



Edward Jenner lies buried in Berkeley church, Gloucestershire. It was at Berkeley that he was born, his father being the rector of the parish at the time. Jenner's house, "The Chantry," was situated next to the churchyard.

same disease. The proof of this, however, was fraught with enormous difficulties. Jenner was often misled, and at every point in his investigations he encountered contradictions and obstacles which threatened to destroy the labour of years. But he faced them honestly, and not even the most vigorous opponents of the principle of vaccination ever found so many serious arguments against it as Jenner himself.

It was necessary to discover the origin of this disease which mankind owed to the domestication of animals. Jenner at one time believed that it began with an affection of horses commonly known as "the grease," the symptoms being inflammation and eruption around the animal's heel. He spent much time in making inquiries as to how this disease might be communicated to the cows, and great was his

exultation when at last he heard of a case where an ostler had dressed a diseased horse and afterwards milked a cow for a dairymaid whom he was courting. The cow developed "cowpox," and the dairymaid contracted it. But this, after all, was but an isolated case, and Jenner, after reflection, was compelled to admit that it provided no real evidence.

Inoculates His Infant Son

By such false clues as these, which seemed at first to promise immediate elucidation, Jenner was continually baffled, but he never lost hope. So deep was his conviction that cowpox, or animal pox of any kind, in some way immunized human beings from smallpox that, in November, 1789, he inoculated his infant son with swinepox matter. The inoculation was successful, for the child contracted swinepox in a slight form. It was impossible, however, to test its value as a prevention against smallpox, since the child did not come into contact with the disease.

As a result of another investigation Jenner was again faced with a flat contradiction of his theory. He found that the disease commonly called cowpox did not invariably protect people from smallpox. Many cases came to light that seemed to prove both science and superstition wholly fallacious. But Jenner clung to his inmost conviction, and, as a result of a still closer investigation, he proved that it was only while the cowpox was in a certain stage that the variola derived from it was capable of rendering a human being immune from smallpox. At other times it was useless.

His Greatest Triumph

This conclusion, based upon reasoning and verified, not by actual inoculation and exposure to smallpox, but by a laborious process of investigation of the actual facts, constitutes the greatest triumph of Jenner's work. It decided him that he could proceed to inoculate people with cowpox matter, at its proper stage of development, and deliberately expose them to smallpox infection without the slightest risk of infection. The principle of vaccination was theoretically proven, although it remained to be carried out in fact.

At last, on the 14th May, 1796, Jenner inoculated a healthy boy of eight years, named James Phipps, with carefully chosen matter from cowpox vesicles on the hand of Sarah Nelmes. The vaccination was successful, but this time Jenner intended to put his theory to the crucial test and expose his subject to the disease which he hoped to conquer. On the 1st July the boy was deliberately infected with smallpox matter, but he did not take the disease.

"But now listen to the most delightful part of my story," wrote Jenner, in an enthusi-



STUDYING SLEEPING SICKNESS IN THE UGANDA PROTECTORATE



Robert Koch (the seventh figure from the left) at Entebbe, the British administrative headquarters of Uganda, whither he went to investigate the cause and discover a remedy for sleeping sickness. During his visits to Africa—he made three in all—he journeyed into South Africa and gave his earnest attention to discovering a means of preventing rinderpest.

astic letter describing his triumph. "The boy has since been inoculated for the smallpox which, as I ventured to predict, produced no effect. I shall now pursue my experiments with redoubled ardour."

Seeking Volunteers for Vaccination

Jenner embodied his investigations in a pamphlet entitled "Inquiry into the Cause and Effects of Variolar Vaccinæ," but, on consideration, he decided to withhold publication until he had made further experiments. For this purpose he travelled to London, where he spent three months endeavouring to find volunteers for vaccination. Much depressed by his failure, and still uncertain as to whether the time was yet ripe for the reception of his great discovery, he returned to Berkeley. He decided, however, to publish his pamphlet.

Further experiments were suspended for some while owing to the complete disappearance of cowpox from the West Country dairies. Meanwhile the seeds that Jenner had sown during his London visit began to sprout. Henry Clive, surgeon of St. Thomas's Hospital, inoculated vaccine matter obtained from Jenner over the diseased hip-joint of a child, thinking that the counter-irritation might relieve the pain. He then found that the child was incapable of acquiring smallpox.

Unfortunately the wide publicity that was given to the theory of vaccination as a result of this experiment led to a disastrous incident

which placed Jenner's cause in grave jeopardy. A man named George Pearson, who, as it was afterwards discovered, knew nothing of the real facts about vaccination, published a pamphlet describing its advantages in extravagant language. Unknown to Jenner, this charlatan opened an institute in London and began practising vaccination. Many of his unfortunate victims contracted smallpox, and a scare was raised.

Jenner hastened to London and quickly showed that the vaccine used had been contaminated with smallpox variolæ. By this time many doctors and non-professional persons were inoculating people with Pearson's impure vaccine, and endless trouble was caused by this gross abuse of a great discovery.

Formation of Jennerian Society

During the remainder of his busy life Jenner was more concerned about the stupidity of those who adopted his principles without carrying out his instructions than about the attacks of the anti-vaccinationists. In 1802 a Jennerian Society was formed, but six years later Jenner withdrew his support owing to disagreement with the methods employed by the resident inoculator. A national vaccine establishment followed, but Jenner was unable to give full attention to its development on account of his eldest son's illness, and during his absence his regulations were again set aside.

At his own small surgery in Berkeley, Jenner

vaccinated people free of charge, and there were often as many as three hundred people waiting at his door. "The vaccine clerk of the whole world," as Jenner came to be known, refused all the offers that were made to him to practise in London, preferring to remain among his own people and to carry out his further studies in comparative solitude.

So widespread was the public response to the principle of vaccination that Jenner might easily have made a fortune out of his discovery, but it was not until 1801 that the little country

A CELEBRATED BACTERIOLOGIST



Robert Koch, who succeeded in isolating the bacillus of tuberculosis and greatly extended our knowledge of those scourges of mankind, Asiatic cholera and bubonic plague.

surgeon's devotion to a great cause was rewarded by a Government grant of £10,000. A further sum of £20,000 was paid to him in 1806, but Jenner's gratification at this appreciation of his efforts was tempered by keen disappointment at the Government's refusal to pass legislation regularizing and controlling the supply of vaccine.

Vaccination became universal during Jenner's life, but it was a continual source of mortification to its discoverer that the widespread use of faulty vaccine produced harm instead of good. People who were incapable of practising vaccination as a science preached it as a religion. Faulty inoculations were carried out to the accompaniment of emotional outpourings and

elaborate rites. In Russia the first child to be vaccinated was christened "Vaccinov."

All this vexed Jenner, who had no thought but for the furtherance of scientific truth. Moreover, the crimes that were committed in the name of vaccination ultimately redounded upon himself as the originator of a practice that could easily be abused.

Fresh epidemics of smallpox led to renewed attacks upon Jenner's theory, and even in old age he was obliged to emerge from well-earned retirement in order to show that it was not vaccination, but the carelessness of the inoculators that was responsible for the renewed outbreak of the disease.

Saviour of Innumerable Lives

Shortly before he died, on the 25th January, 1823, he issued a statement declaring that his opinion of vaccination was precisely as it was when he first promulgated the discovery, and he had the satisfaction of knowing that he had saved many more millions of lives than had been sacrificed during the Napoleonic Wars.

Just as Jenner, in England, had suffered much from the hands of enthusiastic, but incompetent, disciples, so, nearly a century later, Robert Koch, the German bacteriologist, was victimized by admirers who hailed him as the conqueror of consumption.

Koch did not discover a cure for consumption, although he believed at first that he would be able to wipe out this terrible scourge as completely as Jenner had conquered smallpox. The German doctor, however, did discover, in "tuberculin," a preparation of killed tubercle bacilli, an almost infallible test for the detection of tuberculosis, and in this way he saved the lives of many people in whom the disease was developing unnoticed and unchecked.

Early Life of Robert Koch

Robert Koch was born on the 11th December, 1843, at Klausthal, Hanover. He was one of thirteen children of an official in the Prussian Forestry department. Like Jenner, he began life as an ordinary physician, refusing other more remunerative positions for which his brilliant gifts qualified him in order to assure himself leisure for private research.

His labours were soon rewarded. In 1876 he was able to announce to the world that he had obtained a pure culture of the bacillus of anthrax, and also that he had discovered a method of preventive inoculation against that terrible disease. This was a tremendous achievement, for hitherto scientists had been completely baffled by the deadly anthrax which yearly took a heavy toll of animal and human life.

Koch was much more fortunate than Jenner in the recognition that he won for his researches

among the intelligent people in Germany. The Prussian Government granted him a yearly income on the strength of this one discovery, a circumstance that aroused some adverse comment. Scandalized army officers, in fact, were heard to complain that Koch already received as much pay as a captain of artillery.

In 1882 Koch succeeded in isolating the bacillus of tuberculosis, and then, for eight years, he worked unceasingly in search of a preventive against this disease which would be no less effective than the one he had discovered in respect of anthrax. Perhaps it is not surprising that when he first experimented with "tuberculin" he allowed his great hopes to carry him away, with the result that misleading reports of the efficacy of his discovery were widely circulated.

Valuable Discovery

Koch's reputation was not lessened by this set-back, but rather enhanced, for "tuberculin" was a really valuable discovery, and he had pushed research farther than any scientist engaged in the warfare against a terrible scourge. "The greatest German doctor of our time," as his countrymen called him, visited London in 1901 and created a sensation by his announcement that human and bovine tuberculosis were not, as had hitherto been supposed, the same disease.

This assertion produced a dramatic result in England. At that time a great effort was being made to combat the rapid spread of consumption. A commission had been appointed to take drastic steps against the spread of infection, and one of the decisions arrived at was that large quantities of tubercular cattle in this country would have to be destroyed.

Koch's view that consumption was not acquired through drinking the milk of tubercular cows made such an impression that the cattle owners in England successfully appealed against the order for the destruction of their cows. For a time there was a complete reaction against previous theories of infection, but Koch subsequently modified his view, and to-day the utmost vigilance is still exercised in regard to infected cattle.

The German doctor, working under better conditions than Jenner, and aided by the general increase of scientific knowledge in his time, carried the campaign against disease a long stage forward. He will always be remembered as the originator of the principle of immunization against bacterial infection by the prompt administration of killed cultures of the infected agency. By this means he protected mankind against Asiatic cholera and bubonic plague, and he made important investigations in respect of sleeping sickness and the African rinderpest. He was awarded the Nobel Prize in 1905, and died five years later on the 28th May, 1910.

METCHNIKOFF AND HIS FAITHFUL ALLY



Born a Russian, Elie Metchnikoff, one of the leading bacteriologists of modern times, became a naturalized Frenchman. He expressed the belief that a diet of sour milk would set up opposition to intestinal bacteria and thus prolong human life.

Other bacteriologists in recent years have made wonderful discoveries showing still further how man may fight disease by the method of inoculation which Jenner was the first to adopt scientifically. Complaints ranging from diphtheria to a bad cold are nowadays checked in their early stages by the injection of a serum prepared from the bacillus of the complaint in question.

There have even been attempts to prevent fatigue by inoculation with the toxin which is produced in human muscles that have been overworked; and, in 1909, a Russian professor

of zoology, named Elie Metchnikoff, startled the whole world by his theory that the bacillus existing in sour milk acts as a preventive against the advance of old age.

Unfortunately, it was not until Metchnikoff began to feel the oncoming of age in himself that he developed the most interesting of his theories, and he did not live long enough to pursue his investigations very far. He left behind him, however, a mass of valuable data, both statistical and experimental, which forms the basis of the great activity going on in laboratories all over the world and the aim of which is to unravel the mystery of death as well as disease.

Metchnikoff was born on the 15th May, 1845, at Wanobka, in Russia. His life was dedicated

BELIEVER IN LIFE PROLONGATION



That man need not succumb to disease was a firmly rooted belief of Metchnikoff. He also advanced the theory that natural death need not take place so soon as it does.

to science from a very early age. He spent his youth and manhood uneventfully in laboratories and hospitals, gathering the material which he used in later life in compiling his two most famous books, "The Nature of Man" and "The Prolongation of Life."

After completing his studies in Russia and Germany Metchnikoff was appointed professor of zoology at the University of Odessa. His duties were light, which enabled him to devote much time to private studies. Bacteriology then attracted him, and as a result of some important researches into the function of the white and red blood corpuscles, he was appointed in 1887 to the post of assistant director to the Pasteur Institute in Paris.

Here, amidst surroundings that provided him with ever-increasing knowledge and experience, he gradually formed his conception of a new plan of attack upon the three age-long enemies of mankind—disease, old age, and death. He did not publish his conclusions until he had passed his sixtieth year.

Metchnikoff's main contentions were that man need not die of disease, and that even natural death is the result of a disease which can be arrested, making it possible for human life to be prolonged for very much longer than the traditional three score years and ten. He believed that when death came it should be as the result of an instinct just as strong as that which impels people to hold on to life.

Views on Natural Death

In his attempt to prove his case, Metchnikoff lost no opportunity of visiting centenarians and people who had lived several years beyond a hundred. He found that there were many more of these people than is usually supposed, and that although, of course, they suffered from bodily and mental decay, there were still signs in them of continued reproduction of the body and brain cells. He came to the conclusion, therefore, that death was not simply a matter of "wearing out," but that it followed, more or less rapidly, upon certain morbid changes.

One of the most striking of Metchnikoff's discoveries was that the remedy which Nature provides for the resistance of disease in man develops, in the long run, into the "disease" of death. In other words, the cells in the blood known as the "phagocytes," whose function is to attack disease germs in the blood-stream, also have a deteriorating effect upon the human organism and lead to its premature decay. To this process, and to the activity of microbes resulting from the putrefaction of food, Metchnikoff ascribed the shortening of man's life.

Prolongation of Human Life

Considerable opposition was aroused by Metchnikoff's views, but he remained staunch in his belief that human life could be prolonged, and even declared that it was not until an individual had passed the age of forty years that a true "sense of life" was developed, which made it of vital importance that many more years should be added to the normal span.

Metchnikoff, in fact, was as much a philosopher as a scientist, and while he urged mankind to cultivate the will to live long and live wisely, he showed how scientific knowledge could help.

Metchnikoff received the Nobel Prize in 1908, and died on the 16th June, 1916.

[See Metchnikoff's "Immunity in Infectious Diseases" (1906) and "The Prolongation of Life" (1907); Koch's "On Cholera Bacteria" (1886) and "On Bacteriological Investigation" (1891); and "Life of Edward Jenner," by Dr. John Baron (1850).]

The PETER PAN of MODERN LITERATURE

How the Spirit of Youth in the Heart of Sir James Barrie has Delighted Thousands of People Through the Medium of His Books and Plays

"I AM a man of sentiment only," says Tommy in "Tommy and Grizel," speaking for his creator, Sir James Barrie. He would be different if he could, we feel, and yet, what man is more noble than the man of sentiment? This particular "man of sentiment" came from that land of conquerors, Scotland, as long ago as 1883, eager to subjugate literary England. As journalist, as essayist, as novelist, as playwright, he has caught us completely in the web of his phantasy, and made us all willing partners in his dreams. Last of all, he has entrapped that most concrete and matter-of-fact institution, the cinema, and has voyaged to America, there to watch over the adventures of *Peter Pan* in film form.

Sir James Matthew Barrie was born at Kirriemuir, in Perthshire (the "Thrums" of so many of his books), on the 9th May, 1860. His boyhood was passed at Kirriemuir and at Dumfries, where his elder brother was inspector of schools. In "Margaret Ogilvy," by her son J. M. Barrie, most of the secrets of that son's childhood are laid bare. First and foremost Barrie was certainly not born with a silver spoon in his mouth, for he writes "On the day I was born we bought six hair-bottomed chairs, and in our little house it was an event . . . they had been laboured for."

Barrie must have passed a joyful childhood, since no child could have had a more delightful mother than "Margaret Ogilvy," who brought him up. A rich imaginative atmosphere helped to eke out their slender financial resources. By schemes and plans and economies, all entered upon in a spirit of laughing adventure, the means were found for Barrie to be put to school at Dumfries Academy. From there he proceeded to Edinburgh University—a step which involved the most thrilling adventures

of all in domestic economy. Mother and son played a game together of pretending that "it would be impossible to give me a college education." But, continues Barrie, "was I so easily taken in, or did I know already what ambitions burned behind that dear face?"

Nevertheless, her son's true education took place neither at Dumfries nor at Edinburgh, but by "Margaret Ogilvy's" own fireside.

"We read many books together when I was a boy, 'Robinson Crusoe' being the first (and the second)." When he was eleven, James and his mother had fully embarked on a career of literary phantasy together. "Margaret Ogilvy suggested that her son should write tales for himself. 'I did write them, but they by no means helped her to get on with her work, for when I finished a chapter I bounded downstairs to read it to her, and so short were the chapters, so ready was the pen, that I was back with new MS. before another clout had been added to the rug' (which Margaret was making).

Thus mother and son shared a life in which the imagination surpassed all else in importance.

Through the attic window of their cottage, Barrie "could see nearly all Thrums." Looking out from this window, Barrie, imbued with that intimate blending of keen perception and whimsical fancy which his mother and he had so much developed in their daily life, unconsciously, and without premeditation, wove in his mind the materials which were later to be incorporated in his "Auld Licht Idylls," "Margaret Ogilvy," and "A Window in Thrums." His mother shaped his mind in these happy days at Kirriemuir. All his fancy, all his sentiment, all his whimsical charm, originated in the years he spent with the delightful, tender-hearted "Margaret Ogilvy."

SIR JAMES BARRIE AND ELLEN TERRY



When Sir James Barrie attended St. Andrews University to receive the honour of the Rectorship, Miss Ellen Terry received the honorary degree of Doctor of Laws.

In 1882, Barrie graduated from Edinburgh University as M.A. In his earliest days at Edinburgh Barrie had revived his childish dreams of authorship, and had written a three-volume novel. Mother and son packed up the MS. with the greatest care and sent it off to a publisher. "The publisher replied that the sum for which he would print it was a hundred and—however, that was not the important point (I had sixpence); where he stabbed us both was in writing that he considered me a 'clever lady.' I replied stiffly that I was a gentleman, and since then I have kept that MS. concealed. I looked through it lately, and, oh! but it is dull. I defy anyone to read it."

Determined to be an Author

About the time he left the university, two maiden ladies asked Barrie what he was to be. "When I replied brazenly, 'An author,' they flung up their hands, and one exclaimed reproachfully, 'And you an M.A.!' " For in Scotland then all M.A.'s aspired to the ministry. But Barrie's mind was made up; an author he would be, so he cast about for the best avenue of approach to the literary Muse.

Owing to his sister seeing an advertisement

in a paper for a leader writer on the *Nottingham Journal*, Barrie obtained his first journalistic appointment—for he had decided, on "Margaret Ogilvy's" advice, to approach literature through journalism. He went to Nottingham in February, 1883, and for eighteen months and more he wrote often as much as four columns a day of political leaders and miscellaneous articles signed "Hippomenes," and "A Modern Peripatetic." For those who would learn more of his Nottingham experiences, Barrie has published a full record of them in his "When a Man's Single."

"An Auld Licht Community"

The *Journal's* leaders, however, did not absorb all his Scottish energy, and Barrie was busy "trying journalism of another kind and sending it to London, but nearly eighteen months elapsed before there came to me, as unexpected as a telegram, the thought that there was something quaint about my native place." Acting on this thought he wrote an article entitled "An Auld Licht Community," and sent it off to the *St. James's Gazette*.

The article was accepted. Barrie was overjoyed with his good fortune, and also with the *St. James's Gazette*. "To this day," he wrote

A PEACEFUL HAVEN OF REST IN THE PASS OF KILLIECRANKIE



When the noise and bustle of London jars on Sir James Barrie's nerves, he retreats to his peaceful little cottage, almost hidden among the trees, in the Pass of Killiecrankie. Here, alone with the children of Nature, he can refresh his youthful soul with the delights of the open air and with the companionship of thoughtful silence.

For biographies not included in the Groups see detailed index

SURROUNDED BY CHILDREN IN THE HOME OF HIS BOYHOOD



Perhaps the happiest moments of Sir James Barrie's life are when he is surrounded by a crowd of adoring children. In the picture we see the author among the children of his old school, after they had produced a play, *The Duke of Christmas Daisies*, which was founded on excerpts from one of his own books.

(before the paper was incorporated with another), "I never pass its placards in the street without shaking it by the hand." Moreover, the editor of the *Gazette* soon wrote asking for more; and so, early in 1885, Barrie bade farewell to Nottingham, and moved to London, where he contributed regularly to the *St. James's Gazette*, the *Anti-Jacobin*, and the *Edinburgh Evening Dispatch*.

Shortly after his arrival in London, Barrie collected together his "Auld Licht" sketches and, with their publication in the form of a book in 1888, he may be said to have graduated formally from journalism to literature. He was lucky in being able to leave journalism while he still enjoyed the fun of it all—before he had grown oppressed by the dreary task of daily grinding out the maximum number of words upon nothing in particular in the minimum number of minutes.

A New Vein of Humour

Quick on the heels of "Auld Licht Idylls," which is a group of sketches portraying the adherents of a particular community in Kirriemuir, came "A Window in Thrums" (1889), and "The Little Minister" (1891). In these books Barrie worked a new and rich vein

of Scottish humour. He appeared as something entirely new in English letters, a whimsical and sentimental humorist, who was yet as racy, as full of local colour and idiomatic phrase as Dickens or Sterne. He again, in his own inimitable way, did what Dr. Johnson claimed for Samuel Richardson—"enlarged the knowledge of human nature and taught the passions to move at the command of virtue."

First Successful Novel

Hitherto, he had mainly been content to appear as a droll, but "The Little Minister," his first successful novel, made him ambitious for a novelist's laurels. In consequence, "Sentimental Tommy" (1896), and "Tommy and Grizel" (1900) made their appearance. In these two works Barrie touches the sentimental chord almost exclusively—one might almost say he exploits his own sentiment a trifle ruthlessly.

His genius is not entirely fitted to analyse, to construct, to theorize over his puppets; he had not the manner to follow up the then recent triumphs of George Meredith and Thomas Hardy. Of course, his novels have their ardent devotees; but, without exaggeration, one might say that their place, in comparison with his plays, is no more important than the place George Bernard

Shaw's "Novels of My Nonage" take in relation to his great creations for the theatre.

Before the plays, however, we must consider Barrie's children's books, for in "The Little White Bird" and "Peter Pan in Kensington Gardens" Barrie has scored a success as personal and as positive as Lewis Carroll's. Sentiment for its own sake was the pit which yawned beneath Barrie's feet in his novels, the pit into which he sometimes vanished. In "The Little White Bird," however, he blends delicate pathos with fairy laughter in exactly the right proportions with an indescribable deftness of

THE CREATOR OF "PETER PAN"



The best-loved work by Sir James Barrie is that wonderful fairy tale, "Peter Pan." Though written for children, it appeals just as strongly to grown-ups.

artistic touch. It is a children's book—but one for children of all ages, the older the better, perhaps.

"Peter Pan in Kensington Gardens," of course, is one of childhood's most supreme joys. How many thousands of small hearts have thrilled when someone has started to read (possibly for the fiftieth time) that entrancing narrative which begins to unfold with the magic words: "Kensington Gardens are in London where the king lives." It is, very possibly, the quintessence of Barrie, an idyll into which he

has managed to distil more fairy essence than into anything else he has done.

Barrie first attacked the theatre with a play called *Walker, London*, a play which has now been largely and justly forgotten. It met, nevertheless, with some success, and he followed it up quickly enough with *The Professor's Love Story* (1895), which Mr. Granville Barker has called "about as cynically bad a play as any man of its author's calibre could expect to write, tried he never so hard." So far Barrie had been trying his hand, had been experimenting to see if his fancies and ideas were suited to the glamour of the footlights.

Production of *Quality Street*

However, these experiments bore ample fruit in *Quality Street*, that charming echo of the Napoleonic Wars, which was produced with immense success during 1903. *Quality Street* first showed us, on the stage, the Barrie with whom we are now all so familiar—the dramatist, all taste and sensibility, whose dialogue can paint a picture more surely and delicately than all the art of scene-painters and the resources of wardrobe mistresses.

The Admirable Crichton quickly followed *Quality Street* (both plays, in fact, being produced in the same year), and Barrie took another step forward. As daringly as ever he balanced his romance on the edge of the impossible, yet he added a spice of satire to his humorous sentiment.

The remarkable idea of the complete Butler Crichton changing places with his master, Lord Loam, on a desert island, and doing so naturally and quietly, is one of Barrie's most elfin inspirations of genius. The play scored an instant and immense success. It has been equally successfully revived since. With *The Admirable Crichton*, moreover, Barrie stepped into the foremost rank of playwrights.

The Spell of Imagination

There is not space here to mention all his subsequent plays. He has written a play about politics in *What Every Woman Knows*. At least, you think it is going to be a play about politics; but Barrie (as usual) takes you in completely, and really the echoes of politics only resound in the background, for Barrie could never flatter politics with his serious attention—the things of the imagination held him too completely in happy thrall.

In 1904, *Peter Pan* was first played in a theatre. It has remained an annual fixture ever since, and is the stage counterpart of Barrie's children's books, which have already been mentioned. Completely at liberty to cast possibility to the winds, to follow his fancies unrestrained, Barrie is here absolutely at his ease, treating the theatre as a gigantic toy.

AN EXCITING SCENE TAKEN FROM "THE LITTLE MINISTER"



"The Little Minister," published in 1891, was the first successful novel that Barrie wrote. Later it was produced on the stage, became a great success, and attracted large audiences. The thrilling scene depicted here is where Lady Babbie escapes from the soldiers by masquerading as the wife of Gavin Dishart.

Mr. Darling, who will not take his medicine, the children's Newfoundland dog nurse, John's top-hat turned into a chimney-pot, the pirates, the ticking crocodile, the Indians, the great appeal, "Do you believe in fairies?" (made to the audience that the dying fairy may be restored to life)—all these, and many more, crowd into our memories.

Courage of Their Faith

The very unreality of the play is its main strength, especially with children. Maeterlinck and Barrie, almost alone among modern playwrights, have been bold enough to put creatures quite divorced from life on to the stage, without ostentatiously labelling their pieces "Fable," or "Allegory," or some such name. They have been brave enough to put into practice their faith that the imagination, beyond all else, is what counts.

The reader may complain, having read thus far, that while something has been said of Barrie's works, little or no mention has been made as to what manner of man he is himself. To which objection only one answer can be given, namely that, apart from his works and what autobiographical details he himself has chosen to reveal, we do not know. We do know, however,

that unlike most literary men, Barrie does not indulge in many recreations. In his younger days he could wield a good bat at cricket, but beyond this sport, and the great solace which he derives from his much-loved pipe, he has very few hobbies indeed.

Fondness for Tobacco

The fact must not be neglected—how evident it is—that Barrie enjoys tobacco as much as any other man might enjoy billiards or collecting rare pieces of china. He is a devoted servant to the "fragrant weed." He has even gone to the extent of proving his devotion in a little book which he called "My Lady Nicotine."

There is a story told which, if it be true, well illustrates the author's intense dislike for all unnecessary conversation. One day a lady visitor made an unexpected call on Barrie and found him smoking in a room, in company with one of his male cousins.

For a long time she tried her utmost to engage the author in conversation, choosing her subject with a tact which would have done considerable credit to a diplomat. The attempt was a miserable failure. Apart from giving monosyllabic answers to her questions, Barrie remained silent, puffing away at his briar.

For biographies not included in the Groups see detailed Index

At last, in desperation, the visitor left the room, chagrined that success had not rewarded her efforts. About an hour later she returned. The two men were still in their same positions, clouds of smoke were still ascending from the two pipes, and the same silence enshrouded them.

"Well, you *are* having a lively time!" she exclaimed sarcastically.

"Fine," drawled Barrie. "We haven't spoken a word since you went away."

Rector of St. Andrews University

Sir James Barrie is a member of the Athenæum Club. He was created a baronet in 1913, and

OUT FOR A WALK WITH EARL HAIG



Barrie has made a lasting name in literature. There can be no doubt that centuries hence, if English be then a live language, his works will still be read.

has been Rector of St. Andrews University in his native country. But all these external details, and the many more that could be added of a like nature, do not, in his case, give us much information. The details of the lives of many men, of many great men, disclose the secrets of their character and ambitions, but such a method is useless in dealing with Barrie.

The only ways in which we can learn anything about such as he, is by reading his books, by going to see his plays, and by listening to his rare speeches—which are surely delightful methods. On the rare occasions when Barrie

can be persuaded to adopt the rôle of public speaker, he sometimes gives interesting revelations of incidents that happened in his boyhood days, the days that are ever-present in his memory.

Of his schooldays he has a fund of whimsical anecdotes. He has told the public how he suffered from the terrible habit of reading "penny dreadfuls," and the way in which he was cured. The following is the actual account he gave of his terrifying experience:—

In those tender days, I used, when in funds, to devour secretly penny dreadfuls, containing exclusively sanguinary matter. They were largely tales about heroic highwaymen and piracy on the high seas; but what most enamoured me were the stories of goings-on at English boarding-schools. Those were the schools for me.

The masters were sneaks, and the boys blew them up with gunpowder. My mind became so set on explosions that when a Sassenach sent me a box containing mysterious red and blue tubes I placed them one by one near the fire, and darted back in confidence that they would go off. I dare say I wept when I discovered that they were only coloured chalks.

In "Chatterbox" I read an article on the dire future in store for those that read penny dreadfuls. I tried to stand up to it, but when black night fell I stole off to a distant field, my pockets stuffed with back numbers, a shovel concealed up my little waistcoat, and deep in the bowels of the earth I buried the evidence of my guilt.

Some Characteristics

Barrie is the sort of man who makes his elfin Peter Pan remark: "To die would be an awfully big adventure." He is the sort of man who conceives of a London police constable as the hero of a play, and then makes him as whimsical, as poetic, and as fanciful as he is himself. The sort of man who, though he knows literature from the L to the last E, yet writes always so simply and unpretentiously that everyone can understand him, even what someone has called "those small aborigines, whose cave-dwellings and rock-shelters are under piano and table." In short, Barrie, like Peter Pan, is the sort of boy who never grows up.

Tremendously shy, or else we should know much more about him than we do, Barrie has become a great force in our English theatre. He has founded no school, because his genius is far too intensely individual to afford much food for professional disciples. But, desperately laying his shyness aside, he slips into the theatre wherever his plays are being produced, and in the most tentative and hesitating way he makes suggestions. Suggestions, moreover, on which the most gifted and experienced of actors are only too delighted to seize. In a word, he has transformed the acting in London.

RUSKIN IN THE LAND OF HIS INSPIRATION



From his first sight of it—entering as he did, by the grandest pass, the Via Mala—and throughout the remainder of his life, Italy was for Ruskin a land of inspiration. Especially was this true of Venice. One memorable day in the year 1845 Ruskin knocked at the portals of the Scuola di San Rocco in Venice and beheld the then neglected Tintoretto within. He came away feeling that he had seen that day the Art of Man in its full majesty for the first time—and that there was also a strange and precious gift in myself enabling me to recognize it.

[To face 111]

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A LOVER of ART and the HOMELY VIRTUES

John Ruskin, to Whom Art was Life and Beauty a Call to Action, and Who Disdained Peace until He had Spent Himself on Others

"I FELT that a new world was opened to me, that I had seen that day the art of man in its full majesty for the first time; and that there was also a strange and precious gift in myself enabling me to recognize it." In these words did Ruskin describe the effect produced upon him when, having knocked at the portals of the Scuola di San Rocco in Venice and gained admittance, he beheld for the first time the glorious Tintoretto within. This "discovery" was a turning-point in his life, and in great measure determined the current of his career.

Of all writers Ruskin has done the most to establish and maintain the fame of Tintoretto at the height that it deserves. But, over and above this direct effect, Ruskin's influence on art in general has been immeasurable, and the moral of his teaching—that, to live, all art requires truth, nature, purity, and earnestness—has long been an axiom of all art work and art criticism.

John Ruskin was born on the 8th February, 1819, at 54 Hunter Street, Brunswick Square, London. The little house can be recognized by a tablet placed on it by the Society of Arts. His father, a Scotsman settled in London, was a wine merchant, who combined with great business acumen a sincere love of art and literature. John James Ruskin delighted in reading aloud and in collecting drawings of landscape and architecture. Engaged all day in the City, he allowed his son every morning to watch him shaving, after which operation a story was always forthcoming about Conway Castle, a

picture of which hung over the dressing-table. In the evenings he would read to Mrs. Ruskin while the boy sat all attention.

Mrs. Ruskin was a handsome, stern, devoted woman of the old Puritan type, the daughter of a master mariner in the herring fishery. In

later life, when she hurt her leg, she preferred the support of a chair-back to that of her husband's or son's arm. On a summer's day she would travel from sunrise to sunset in her carriage without once leaning back. This unyielding attitude characterized the least actions of her life. Beyond a box of bricks and a bunch of keys, she allowed her only child no toys. An aunt once brought him a gorgeous Punch and Judy from the Soho Bazaar. These were at once put away, and never seen again.

John read the Bible daily with his mother. They began with the first chapter of Genesis, went right through, and then began again. Mother and son read alternate verses, and no syllable was allowed to be missed, misplaced, or mispronounced. No play-fellows were allowed. The father and mother "kept themselves to themselves," and what was considered right for the parents was ex-

pected of the child. For hours the boy would muse upon the colours and patterns of the carpet, and, when the family moved to Herne Hill in 1823, he contemplated the garden and the view of the Norwood hills and the Thames valley with equal attention.

From his earliest days the boy accompanied his parents on their annual summer tour, when Mr. Ruskin travelled not only to sell wine but to see pictures. For these expeditions the

AT THE AGE OF THIRTY-FOUR



Millais famous portrait of Ruskin standing on the rocks at Glenfinlas. This visit to Scotland was destined to have a profound effect on the lives of both men.

party of three always had a private carriage and always visited some region of great natural beauty. Before he was eleven Ruskin had seen most of the picturesque parts of England and Wales and much of lowland Scotland, and so greatly did the boy enjoy these driving tours that when he grew to be a man he had a posting carriage built, in which he revived the pleasures of his early days.

A Writer of Stories at Seven

Till the age of ten Ruskin was taught entirely by his mother. After that he had various private tutors to ground him in such subjects as the classics, French, and mathematics. For two years he was at a day school at Camberwell, and later he attended lectures at King's College. At four years old he could read and write. His parents gave him every encouragement to put his impressions on to paper. At seven he had written many stories, and the following year he began writing verse.

After he was fourteen the summer tours with his parents took a wider range. The Rhine, Switzerland, Italy—indeed, most of the beautiful and romantic regions of Europe were visited. To the study of the picture galleries of his native land was now added the close and earnest inspection of the art treasures of the Continent. Wherever the travellers went, Ruskin wandered about at will, sketching, studying pictures, examining minerals (an early and lifelong hobby), and making notes on what he saw and felt. His first sight of the Alps made a deep and lasting impression. "For me," he wrote, "the Alps and their people were alike beautiful in their snow and their humanity. . . . I went down that evening from the garden terrace of Schaffhausen with my destiny fixed in all of it that was to be sacred and useful."

A Student at Christ Church

In 1837 Ruskin went into residence at Christ Church, Oxford, but even then the leading-strings of his childhood and boyhood were not removed. The redoubtable Mrs. Ruskin left home and husband and resided in Oxford too, and from her lodgings in the High Street kept watch over her son's comings and goings. His college in no way resented this remarkable proceeding, for anything may be forgiven a man of genius. His course at Oxford was interrupted by ill-health, and he did not take his degree until 1842.

Meanwhile Ruskin had constituted himself the champion of the painter, J. M. W. Turner. In 1832 he had received as a birthday present a copy of Samuel Rogers' "Italy" with Turner's vignettes. The vignettes captivated him. Four years later some of Turner's pictures at the Royal Academy had been savagely attacked in *Blackwood*. Ruskin wrote an article in

defence of the artist, which his father sent to Turner, but which was never published. The old painter, however, was duly grateful to his youthful defender.

In 1842 Ruskin began the first volume of "Modern Painters." From a defence of Turner's later manner the book grew into an elaborate treatise on the general principles of art. In it established reputations were not spared; the reasoning was fortified with a mass of references; and the whole book was conceived in a tone of authority astounding in so young a writer, and written in gorgeous coloured prose. This first volume of "Modern Painters" was published in 1843, was welcomed with enthusiasm, and was an immediate and lasting success.

The head of the young author was in no way turned by this triumph. He went on quietly working at his drawing and his geology and mineralogy, and persevered with his studies in art. He was much abroad, in France, Switzerland, and Italy. It was on one of these tours, in 1845, that he first saw the Tintoretto's in Venice.

Spell of the Tintoretto's

With the spell of the Tintoretto's still upon him Ruskin returned to Denmark Hill, where his parents were then living in a large house with an ample garden, and completed the second volume of "Modern Painters." Whereas the first volume had been written avowedly to extol modern painting, the new volume was loud in the praises of the work of the ancients, and it is here that Ruskin sets forth his spiritual theory of art. This volume, which was published in 1846, had as great a success as its predecessor, and firmly established the fame of the young writer.

In 1848 Ruskin married Euphemia Chalmers Gray, a very beautiful girl whose family had long been known to his parents. The quiet, studious bridegroom was some ten years older than the brilliant young bride. The match seems to have been arranged by the parents with little or no thought for the wishes of the young couple.

Annulment of the Marriage

This, however, was not the romance of Ruskin's life—that was to come later. After a tour on the Continent they settled in London, in Park Street, where they saw a good deal of Society, and later they lived at Herne Hill. But the union was foredoomed to failure, and in six years the marriage was annulled. Euphemia was the model for the female figure in John Everett Millais' famous picture, "The Order of Release," and in 1855 young Mrs. Ruskin became Millais' wife.

During his short married life Ruskin immersed himself in his studies and proceeded to

RUSKIN'S STUDY IN HIS BEAUTIFUL HOME IN THE LAKE DISTRICT



In 1830 Ruskin's summer tour with his parents was in the Lake District, and thus led to the wish that he might one day live there. Forty years afterwards his dream was realized, when he bought Brantwood, on the eastern shore of Coniston Water, "a house snugly embayed by the side of the lake."

amass materials for making an elaborate examination of the canons of art. In 1849 appeared "The Seven Lamps of Architecture," in which the writer sought to show that the final test of good architecture was the spirit of which it was the expression — the "seven lamps" being "sacrifice, truth, power, beauty, life, memory, and obedience." This book is, perhaps, the most widely popular of all Ruskin's works.

"A Sermon in Stones"

The first volume of "The Stones of Venice" was published in 1851. This was, as Carlyle said, "a sermon in stones," in which the author set out to explain that the buildings and art of a nation are the concrete expression of a nation's religion, aspirations, morality, and habits. All this time Ruskin had been working on his "Modern Painters," the fifth and last volume of which appeared in 1860.

With this year Ruskin's career entered on a new phase. From 1860 he devoted himself to expounding his views on social and industrial problems, education, religion, and morals. This was but a natural development, in so far as all his art writings had been more or less coloured by moral considerations. Conspicuous among his books on these subjects are "Unto

this Last" (1860), "Munera Pulveris" (1862), "The Crown of Wild Olive" (1866), and the ever popular "Sesame and Lilies" (1871), which gives his conception of the place of woman in the social scheme.

Ruskin's father died in 1864, and from that year until his mother's death in 1871, Ruskin lived with his mother and a cousin, Miss Joanna Agnew (afterwards Mrs. Arthur Severn). In 1871 he bought Brantwood, a property on lovely Coniston Water, and there he lived for the remainder of his life, taking great delight in enlarging and beautifying the house and grounds. In 1885 he made over the house and its contents to Mr. and Mrs. Arthur Severn, and he stipulated in his will that for thirty days in every year the public should be allowed to view Brantwood and its art treasures.

Professor of Fine Arts

In 1870 he had become Slade professor of fine arts at Oxford. The chair was a new one, and Ruskin worked tremendously hard to make himself a really worthy art professor. His course of lectures, he said, cost him infinitely more pains than any of his books. The first lecture was held in the Sheldonian Theatre, as the museum was too small to hold the audience.

He also produced a series of guide-books to enable those travelling abroad to appreciate what they saw, and founded a drawing school, which he provided with valuable works of art.

Ruskin was made an honorary fellow of Corpus in 1871, and his rooms, which were filled with choice pictures, manuscripts, and minerals, became an artistic Mecca. Being especially fond of the walk to Ferry Hincksey, Ruskin was much grieved at the damage done by carts to a piece of green. He, thereupon, set to work to have a new road made, and enlisted the services of the undergraduates as road-diggers. The operation attracted a great deal of comment, both favourable and sarcastic. One don never tired of relating the adventures of himself and his horse on Ruskin's road.

But bumpy though the road was—Ruskin used to say that the only level parts were made by his own gardener—it achieved one purpose, by promoting practical interest in social questions. Among the earnest young road-diggers was Arnold Toynbee, and it was undoubtedly Ruskin's road-digging experiment that led to Toynbee's wonderful work in the East End of London and to the founding of university settlements throughout the country.

In 1875 a great sorrow befel Ruskin in the death of Miss Rose La Touche ("Rosie"), a beautiful Irish woman whom he had hoped to marry. He first met her in 1858, and had given her drawing lessons. She was a strict Evangelical, but Ruskin had outgrown his early faith, and it was partly from religious motives that she refused him. Rose was Ruskin's Beatrice, and her death was a terrible blow to him. In his subsequent lectures he frequently refers to Carpaccio's picture of St. Ursula, for in his mind the face of that saint ever mingled with the well-remembered features of his lost lady.

Before settling down to the enjoyment of his possessions, Ruskin felt that he must do what he could to alleviate the sorrows and hardships of the world outside, and, with this end in view, the writer on art and morals became a practical reformer. In 1871 he started his Utopian crusade by publishing the opening number of its organ, *Fors Clavigera*, a monthly letter addressed "to the workmen and labourers of

Great Britain." Agricultural, industrial, and artistic experiments of various kinds were made, of which one of the most enduringly successful was the museum at Sheffield. The influence of Ruskin's crusade is still felt in many directions, although an immediate practical success was hardly to be expected from a busy art professor.

Ruskin never did anything by halves. Into whatever he undertook—writing books and articles, lecturing, doing good works—he put his whole heart, sparing neither brain nor body.

The death of Rosie had preyed much upon him, and in 1878 he had a severe attack of brain fever, from which he made a remarkable recovery, but he was never the same man again. Similar attacks followed, until at last he realized that rest and quiet were essential.

The last ten years of his life he spent in retirement at Brantwood, cared for by the Severns and occasionally visited by friends. On his eightieth birthday he was greeted with congratulations from all quarters. But his strength had been gradually failing. He had an attack of influenza, from which he could not rally, and he passed away at Brantwood on the 20th January, 1900. He was buried in Coniston churchyard, and a medallion was placed in Poet's Corner, Westminster Abbey.

As a writer of magnificent prose Ruskin has never been surpassed. From the first the public were carried away by the gorgeous imagery of his art works. His later social

writings, less ornate, are perfect examples of lucid easy-flowing style. But it is in what he wrote towards the close of his life that we find the greatest tenderness and charm, and particularly in that wonderful autobiographical fragment, "Præterita" (1885-89), in which we cannot fail to be struck by the brilliant character-sketches, the keenness of recollection, and the limpid flow of the narrative.

Ruskin was munificently generous. His life was spent in almsgiving. He received something like £200,000 on the death of his father, but not a penny of this did he spend on himself—it was all lavished on charity (public and private) and on social and educational objects.

[See Works, edited by Sir E. T. Cook and A. Wedderburn (1903-12); and Lives, by Sir E. T. Cook (1911), W. G. Collingwood (1883), and Frederic Harrison (1902).]

IN THE EVENING OF HIS LIFE



Ruskin spent the last ten years of his life in retirement at Brantwood—years in which he enjoyed some of the peace of old age.



The STORY of the STEAMSHIP MEN

Telling of the Defeats and Conquests of the Pioneers of Steam Navigation, and of How, Through Their Splendid Efforts, Continent is now Linked with Continent

JONATHAN HULLS, whose surname is so appropriate to his genius, is regarded as being the first English inventor of a steamboat. Born in 1699, at Campden, Gloucestershire, Jonathan Hulls, or Hull, is undoubtedly deserving of honour, although, like one of George Stephenson's competitors, he found a difficulty in freeing his mind from the old idea that anything that moved must necessarily have legs.

In describing his new vessel, he claimed for her the advantage that in shallow water his steamboat would propel herself by applying the power of her engine to a sort of punting pole that would strike the bed of the river.

The specifications of Hulls' invention and his own description, published in 1737, are very complete, and from them one can see that his ideas were quite sound. While there is some doubt as to how far he carried out his ideas, it is believed that at least he constructed an experimental steamboat, with which he made trials on the river Avon.

Although this pioneer did not live to see his steamboat become a practical success, his invention is particularly interesting, because apparently he was the first inventor to apply the vertical motion of Newcomen's engine to a revolving wheel, with paddles attached. Hulls intended his steam engine—which was really an adaptation of Newcomen's land engine—to be accommodated in a vessel by itself, in order to act as a tug for pulling sailing vessels in and out of harbours.

The early inventors who tried to devise means of propelling vessels by the application of mechanical force, started with a familiar idea, and endeavoured to apply that idea to a novelty. It was only natural that, after watching the regular motion of several men paddling

in a canoe, they should realize that, if a number of paddles were fixed to a wheel on each side of a boat, and the wheel was turned by a force sufficient for the purpose, the boat would be propelled forward.

The "paddle-wheel" is, therefore, much older than the steamboat, for boats with such wheels are described in the literature of the sixteenth

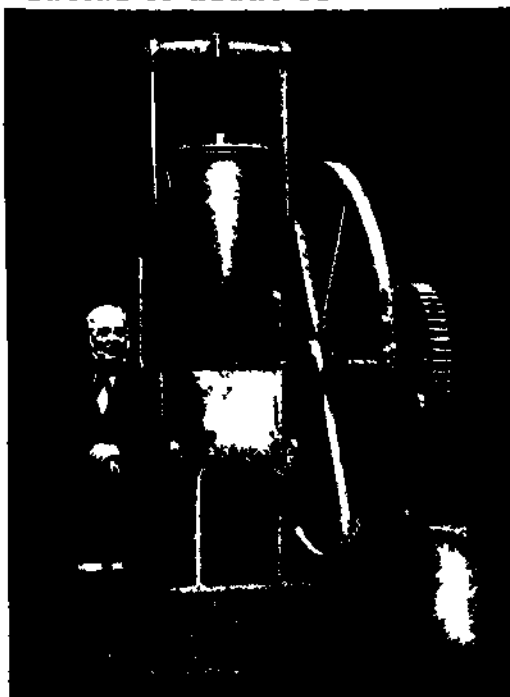
century, the writers telling us that these paddle-wheels were turned by men or by oxen, on the principle of the dog in the wheel-cage of the turnspit.

Those who read the stories of George Stephenson and James Watt—related elsewhere in this work—will be able to appreciate the very great difficulties which confronted the early pioneers of steam navigation. Before their day, the French scientist, Denis Papin (1647-1712), had constructed a primitive atmospheric engine, on similar lines to the later invention of Thomas Newcomen (1663-1729), and, although it is certain that an experimental steamboat was made and tried by Papin in 1707, his invention, like Hulls', apparently never passed the experimental stage.

Newcomen was a locksmith, living in Dartmouth, but, notwithstanding his isolation from men of science and his humble position in life, he devoted himself to scientific study, and about 1712 constructed his first steam engine.

He had, from the first, the idea of using his engine for pumping water from the mines in Cornwall, and soon it was proved to be about the only thing that the engine could accomplish. It had two great defects. In the first place, the steam was condensed in the cylinder itself, which entailed an enormous waste of heat, and secondly, its motion was only vertical. The up-and-down motion, when applied to a see-saw beam, did quite well for pumping, but an

ENGINE OF HENRY BELL'S COMET



This engine, constructed by the man sitting beside it, John Robertson, of Glasgow, was designed by Henry Bell in 1812, and fitted into his thirty-ton boat, the *Comet*.

engine that stopped with maddening perversity would have been of no use whatever to drive a vessel fighting against wind and wave.

Newcomen's engine served a good purpose, however, for it inspired both Watt and Stephenson with the idea of constructing machines which would be more reliable and less wasteful of energy.

When James Watt revolutionized Newcomen's engine by his invention of a separate condenser, he did a thing which made steam navigation possible. His engine was patented in 1769, and, although it still retained the old vertical motion, the engine was successfully used to propel the steamboats on the great rivers of America. Later Watt invented the fly-wheel and the rotary engine.

CURIOUS PADDLE-BOAT PROPELLED BY THIRTY MEN



After experimenting with this curious double-hulled paddle-boat, driven by manual power, Patrick Miller decided that steam power would give better results. He then commissioned William Symington to make an engine.

By this time a good many ingenious men in Britain, as well as on the Continent and in America, were applying their minds to the problem of steam navigation. Two Frenchmen, P rier and the Marquis de Jouffroy, having seen in Paris, in 1775, a small steam engine made by James Watt, started to make independent experiments in their own country. Their efforts, however, were not very successful, although, in 1783, Jouffroy made a steam paddle-boat which moved along under her own power up the river Sa ne.

About this time James Rumsey, of Richmond, Virginia, was making a series of successful experiments with a model boat propelled by steam power, which boat was seen by George Washington. At the same period John Fitch,

another native of Virginia, was interested in the idea of steam navigation. It is this man who is now regarded as the pioneer of American steamboats. He made a boat in which an engine worked a crank, by means of which twelve fixed oars entered the water alternately.

He improved on this design by constructing a boat, 60 feet long, fitted with a comparatively powerful engine and a stern paddle-wheel. This vessel steamed a distance of twenty miles, quite a notable achievement in those days. With renewed interest Fitch persevered with his experiments, and in 1789 he built a vessel that was something far more than a toy. Capable of a speed of eight miles an hour, she ran regularly on the Delaware, where she covered an aggregate of two or three thousand miles in the summer of 1790.

Had Fitch received the encouragement that he deserved, there is a possibility that he might have forestalled Fulton, his fellow-countryman. His work, however, was not justly appreciated, and the inventor was so heartbroken by the indifference with which his ideas were received, that in 1798 he took his own life.

In order to trace the evolution of the steamboat, attention must now be transferred to the lives and work of certain men born in the rugged country of Scotland.

Patrick Miller

The first is Patrick Miller (1731-1815), who, born of poor parents in Glasgow, became, entirely by his own exertions, a wealthy banker in Edinburgh.

Miller went to sea as a boy, and even after he had attained to wealth in commerce, he continued to take an interest in navigation, and experimented with model boats. He built an extraordinary vessel having three hulls lying abreast, with a paddle-wheel on each side of the central hull. These paddle-wheels he intended to be turned by manual power. But his experiments were unsatisfactory, so at last Miller was induced to try a double-hulled vessel driven by steam, and he employed a man named William Symington to make the engine. The vessel was tested in 1788 on Dalswinton Loch, in the county of Dumfries, and the success surprised all who witnessed the incident.

Of William Symington (1763-1831) separate mention must be made, for he is entitled to the credit of designing the first steamboat of any practical use. The son of a working man, and a native of Leadhills, Lanarkshire, he



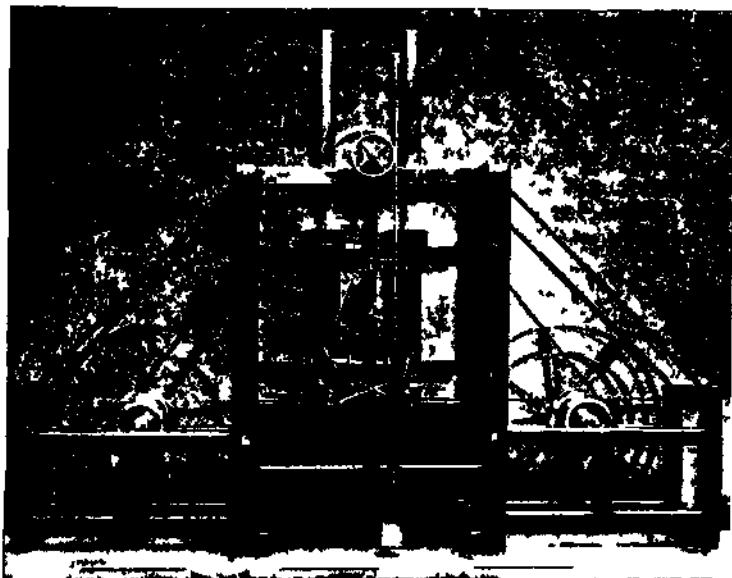
received a university education, with a view to entering the ministry, but, being fond of mechanics, he decided to become an engineer.

Becoming more and more interested in the problem of steam navigation, to which he had been introduced by Miller, Symington persevered with experiments even after the former had abandoned them. In 1801 he took out a patent for an entirely new type of engine. It far superseded the old beam engine, for it functioned with a rotary movement, obtained by coupling the piston-rod, by means of a connecting-rod, with the crank. Fitted to the *Charlotte Dundas*, a tug-boat plying on the Clyde Canal, the engine proved highly satisfactory. It developed enough power to tow for nearly twenty miles two 70-ton vessels loaded.

Unfortunately Symington's joy at his success was short-lived. The canal authorities declared that the wash from such boats would destroy the

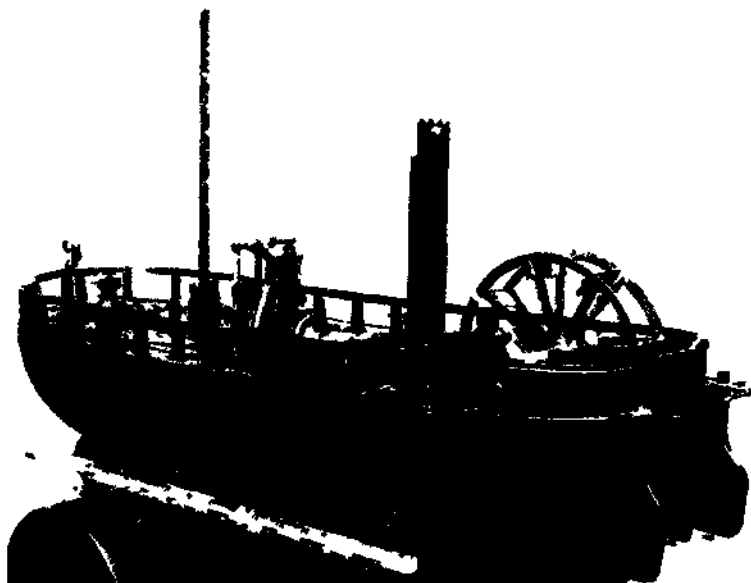
the ideas of subsequent steamship inventors into the right channel. Her simple mechanism is the nucleus of the engines that drive the

WILLIAM SYMINGTON'S FIRST MARINE ENGINE



The first marine engine constructed by William Symington was commissioned in 1788 by Patrick Miller for installation in one of his double-hulled paddle-boats. When tested, the ship attained a speed of five knots.

MODEL OF THE FAMOUS CHARLOTTE DUNDAS



The simple mechanism invented by William Symington in 1801, and used to propel the *Charlotte Dundas*, is the nucleus of the big engines that drive the excursion paddle-boats of to-day. This early tug-boat plied on the Clyde Canal.

banks of the canal, and so the *Charlotte Dundas* had to be discarded. This little craft deserves more than momentary interest, for she turned

modern paddle-wheel excursion boats of to-day. Like many another inventor, William Symington died a poor, disheartened man.

Progress in steam navigation now made a big stride forward. Among the crowd that had lined the canal banks to watch the trials of the *Charlotte Dundas* were two men who were destined to do great things in this particular branch of engineering. One was Robert Fulton, the artist-inventor of America, and the other was Henry Bell, a Scottish engineer who had become a hotel-keeper.

The life-story of Fulton has been told in another part of this work, therefore it is necessary to give only a brief outline of his epoch-making achievements.

In 1803 he had constructed a steamboat, but just when she was ready for her trial trip on the Seine, in France, she sank at her moorings, the engine and boiler evidently



being too heavy for the hull to support. In the summer of the same year Fulton made a stronger boat, which proved a success.

This enterprising and able man then tried hard to purchase an engine from Messrs. Boulton and Watt, as he realized that everything depended on a reliable engine, and, after some delay, a suitable engine was sent to Fulton in America. This engine was placed on Fulton's famous vessel, the *Clermont*, and on the 17th August, 1807, the pioneer passenger steamer started on her first journey from New York to Albany, on the Hudson River, the distance covered being approximately 150 miles.

THE FATHER OF PADDLE-BOATS



William Symington, the son of a working man, holds an important position in history as being the designer of the first practical steamboat—the *Charlotte Dundas*.

Soon a regular service was instituted, and steam navigation in America had become a reality. Fulton built several other steam vessels, but he was much harassed by lawsuits, and did not live long after his great triumph.

Before Fulton's vessel, the *Clermont*, had made history on the Hudson River, John Stevens had, in 1804, made a steamboat with a stern paddle-wheel, revolved by a rotary engine, which made a successful voyage in New York harbour. In the same year a partner of this pioneer builder, Robert L. Stevens, made another steamboat which was even more noteworthy because she was driven by a screw, instead of a paddle-wheel, and because she possessed a tubular boiler.

These two ingenious men were practical engineers, who constructed their own machinery,

and when Fulton returned to America he endeavoured to enlist the services of at least one of them, but he was not successful. An atmosphere of hostility and jealousy clouded the activities of Fulton and the Stevenses. Fulton was often in fear of his steamboats being damaged, and when, later on, his success enabled him to obtain a monopoly of steam navigation on the Hudson River, it was perhaps only natural that his less successful rivals should feel bitter.

First Steamship to Go to Sea

John and Robert L. Stevens had constructed a passenger steamer to compete against Fulton's boat, but, competition being denied them, they took their vessel, which was called the *Phoenix*, by sea from New York to Philadelphia. This event happened in June, 1809, and it was the first occasion on which a steamship ventured out to sea. The venture being successful from a commercial point of view, the *Phoenix* was employed as a passenger steamship on the Delaware River for a good number of years.

At this period in the story of the steamship we must leave America and consider what was being done in Great Britain. Since the *Charlotte Dundas* had rotted to pieces hardly any progress had been made. There was one man, however, namely, Henry Bell (1767-1830), whose work deserves some considerable notice.

He was the proprietor of an hotel at Helensburgh, on the Clyde, and as he stood with Robert Fulton watching the trial of the *Charlotte Dundas*, an ambitious idea dawned in his mind. What a splendid stroke of business it would be if he could inaugurate a steamship service between Glasgow and Helensburgh. The novelty of the transport would be sure to increase the number of his clients.

Bell Designs the Comet

He possessed a considerable knowledge of engineering, and for two or three years he had been carefully studying the question of steam propulsion, so he determined to draw out the plans of a steamboat himself, and have her made by a reputable firm of engineers.

This he did, with the result that in 1812 the *Comet*, a 30-ton vessel, was advertised as being in readiness to ply up and down the Clyde, "to sail by the power of air, wind, and steam." The announcement also stated that "the elegance, safety, comfort, and speed of this vessel require only to be seen to meet the approbation of the public, and the proprietor is determined to do everything in his power to merit general support."

Evidently Bell did not receive the "general support," for, although historically the *Comet* was a pronounced success, commercially she proved to be a dismal failure. Bell, like Symington, did not enrich himself by his

enterprise; on the contrary, in his old age a public subscription had to be raised to relieve him from want.

Now begins a new phase in the story of the steamship's progress. In America paddle-boats were fast coming into common use, plying between the towns on the long, shallow rivers, and soon men began to turn their attention to the possibilities of bridging the Atlantic by the same means as the towns on the river banks were connected.

In 1818 a sailing ship, the *Savannah*, was being built at New York, when Moses Rogers, who had commanded some of the early steamboats, suggested to the owners that she should be fitted with a steam engine. This was done, so that when the vessel put to sea she was a three-masted sailing ship, assisted by two side paddle-wheels. The paddle-wheels were so fitted that, in a few minutes, they could be hoisted out of the water and laid on the deck.

Atlantic Crossed

In 1819 the *Savannah* successfully crossed the Atlantic, and she was, therefore, the first steamship to accomplish this feat. The importance of the achievement, however, is considerably discounted by the fact that, during the three weeks occupied by the voyage from Charleston to Liverpool, steam power was only employed at intervals, extending altogether over a period of some three days.

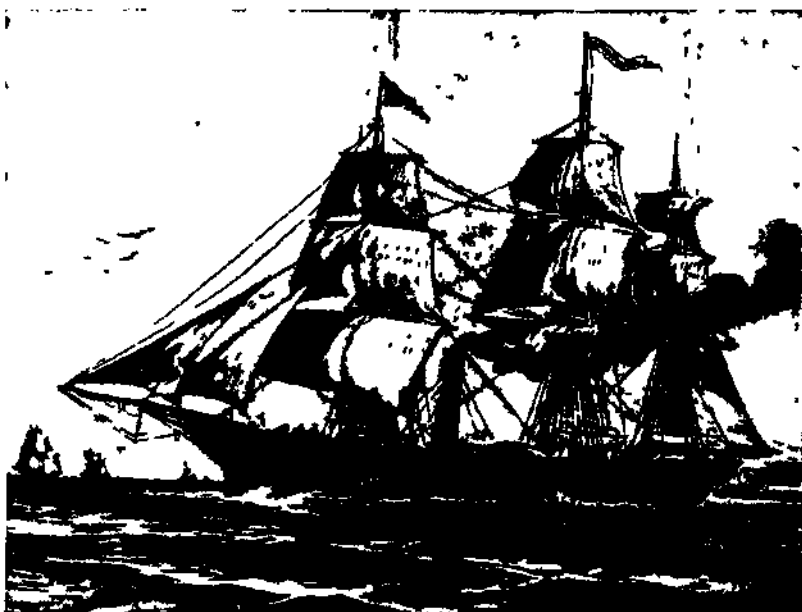
In 1831 a ship named the *Royal William*, fitted with engines made by Messrs. Boulton and Watt, was built at Quebec. Two years later this vessel crossed from Nova Scotia to England in seventeen days, but even in this instance it is thought the journey was not made under steam alone, and that the sails had to be called into use.

The year 1838 is a notable one in the history of the steamship. All at once a number of vessels leaped into prominence by conquering the Atlantic route with the aid of steam alone. The first of these ships was the *Sirius*, under the command of Captain R. Roberts, and she crossed the Atlantic in seventeen days, without any assistance whatever from sails. Before reaching

New York, however, the stokers were forced to burn the ship's spars, because their supply of coal was exhausted.

The *Great Western*, built by that great engineering genius, Brunel, whose life-story is given elsewhere, sailed from Bristol in April, 1838, and made a quicker crossing than the *Sirius*. The *Great Western* was the largest steamship ever built up to that time, being 236 feet in length and of 1,340 tonnage, and her appearance on the Atlantic may be said to have heralded the establishment of the first regular Atlantic steamship sailings with which we are so familiar to-day.

FIRST STEAMSHIP TO CROSS THE ATLANTIC



Though by her voyage in 1819 the *Savannah* may be said to have been the first steamship to cross the Atlantic, it must be remembered that her steam was used really as an auxiliary power and that she relied mainly on her sails.

These ships, and many others that were making history, were wooden paddle-steamers. It has been mentioned that Stevens tried a screw propeller on his experimental vessel in New York harbour in 1804. An idea, too, of a similar contrivance had occurred to James Watt in 1784. Designs for screw propellers were also invented by Joseph Bramah, Littleton, Robert Wilson, and John Ericsson.

The screw invented by Sir Francis Pettit Smith was constructed differently from all others. In 1835 he fitted the screw to a little model vessel and experimented with it on a pond at Hendon, near London. He persevered at his work until finally the screw was adopted for use in several steam vessels, the first of these being the *Archimedes*, launched in 1838. The shapes of screw propellers have altered

considerably since Smith's time, but he drew attention to this method of propulsion more successfully than any inventor had done previously, and it is satisfactory to know that he was honoured and rewarded for his enterprise during his lifetime.

The story of the pioneers of steam navigation would not be complete without making reference to some of those famous men who, although not inventors of steamships, laid the foundations of modern ocean commerce by organizing steamship transport on a large scale. To-day we speak familiarly of ocean liners, but when Samuel Cunard first conceived the idea of ocean lines, with ships running to time-tables like

hold word the world over. Before he was thirty his company was carrying the mails between Newfoundland, Boston, and Bermuda, under contract with the British Government. Subsequently he bought a vessel engaged in the whaling trade, became actively interested in ships sailing between Nova Scotia and the West Indies, and held the position of agent in Halifax for the East India Company, which then did a considerable trade in tea and other products of the Orient.

When steamships had become a practical reality, the possibilities of developing their use were not lost upon such a far-seeing man as Samuel Cunard. Often he used to mention to his friends what a beautiful level track the ocean offered to a floating railway train without wheels.

Cunard's Dream

In 1839 the British Government, impressed by the superiority of steamships when compared with sailing vessels, invited tenders for carrying the mails between England, Canada, and America. Samuel Cunard, who had been one of the shareholders of the *Royal William*, evidently recognized that the contract to carry the mails offered the opportunity of realizing his great dream of establishing a fleet of ocean liners. He did not, however, possess sufficient capital to inaugurate such a scheme, so, failing to obtain financial

assistance in Halifax, he crossed over to England.

In Edwin Hodder's "Sir George Burns, Bart., His Life and Friends," we are furnished with an intimate account of the birth of the first line of ocean steamships. We are told how Samuel Cunard was introduced to Robert Napier, the famous shipbuilder on the Clyde, the constructor of the engines installed in the steamships belonging to the City of Glasgow Steam Packet Company. Napier, in partnership with the shipping firm of G. and J. Burns, had already revolutionized the cargo business between Glasgow and Liverpool, and he was always on the look-out for any new scheme of steamship development.

Cunard was induced to talk over his plans with George Burns, who afterwards, in describing this historic meeting, said: "It was not long before we began to see some daylight through the scheme, and I entertained the

AN ANCESTOR OF THE MODERN LINER



During the year 1838 a number of vessels succeeded in conquering the Atlantic route with the aid of steam. The first of these was the *Sirois*, and she made the voyage in seventeen days without once making use of her sails.

railway trains, it was considered a very novel as well as a very daring idea.

The Cunards had emigrated to America from Wales, and were well established in the Quaker city of Philadelphia, which Benjamin Franklin made famous, even before that printer-philosopher settled there. The American Revolution, which raised Franklin to such distinction, meant banishment to tens of thousands of settlers who remained loyal to England, and among the exiled United Empire Loyalists who left their homes in the seceding colonies and went out to start life afresh in Canada was Abraham Cunard, who settled at Halifax, Nova Scotia. His son Samuel was born there in 1787.

Samuel Cunard entered business immediately after leaving school, and having become a partner in a Boston shipping firm, he was soon displaying that characteristic spirit of enterprise which later was to make his name a house-



A GIGANTIC STEAMSHIP IN ADVANCE OF HER TIME



Determined to build a vessel embodying all the improvements he had already introduced into other steamers, Isambard Brunel, in 1854, started to construct the *Great Eastern*. She was 692 feet in length, 83 feet in breadth, propelled by paddle-wheels and screw, and of a tonnage of 18,915. For some years the largest vessel afloat, she was considerably before her time.

proposal cordially." Burns said he would have to ask a few friends to join them, and that would take time, perhaps a month. "Very well, then, I'll wait," said Samuel Cunard.

Within a few days, solely by reason of the faith which others placed in his judgment, George Burns had induced sufficient partners to put £5,000 each into the concern, so that the necessary capital of £270,000 was subscribed. A tender was submitted to the Government for carrying the mails once a fortnight between Liverpool, Halifax, and Boston; the contract, to cover a period of seven years, was signed; and the Cunard Company, or, as it was at first called, "The British and North American Royal Mail Steam Packet Company," was formed.

The *Britannia* and Her Sister Ships

It is outside the scope of this article to follow in detail the romantic and successful career of this great enterprise. Suffice it to say that four wooden paddle-steamers were built specially for the new service—the *Britannia*, the *Acadia*, the *Caledonia*, and the *Columbia*.

Edwin Hodder gives the following description of the sailing of the first Cunard boat.

On Friday, the 4th July, 1840—the Celebration Day of American Independence—the *Britannia*, punctual to the very minute of the advertised time, left her moorings on the Mersey, amid the cheering of immense crowds, acknowledged by Mr. Samuel Cunard, who himself went out with the first mail American steamer.

It was calculated that the *Britannia* would reach Boston in fourteen days and a half, but she reached the harbour four hours before the time, having made the voyage in fourteen days and eight hours, at that time considered a rapid passage. The arrival of the first mail steamer in America created even greater enthusiasm than her departure from the English side. . . . During the first twenty-four hours of his stay at Boston, it was recorded in the local papers, with justifiable pride, that Mr. Samuel Cunard received no less than 1,873 invitations to dinner.

This daring pioneer, whose name is one of the most honoured in the annals of shipping, was fifty-three years of age when he crossed the Atlantic on board the *Britannia*. Before his death the Cunard line owned thirty-seven steamships, although, in contrast with such modern giants as the *Berengaria* (52,700 tons), it is of interest to note that the largest vessel which Samuel Cunard saw sail under his flag was only 2,243 tons. Sir Samuel Cunard died in London, on the 28th April, 1865, at the age of seventy-eight.

The Man Who Raised the Capital

George Burns, who raised the capital with which the first line of Atlantic mail steamers was established, was born in 1795, the son of a minister, Dr. John Burns. Educated at Glasgow Grammar School, at seventeen he began his commercial career as a junior clerk in the office of a spinning company. When he was twenty-three, he entered into a partner-



ship with his elder brother James, as a general merchant, and travelled for the firm.

At that time the Glasgow and Liverpool shipping trade was carried on by three companies, each of which owned six small sailing vessels. By a happy inspiration the brothers Burns decided to apply for the Glasgow agency of one of these companies, whose headquarters were in Liverpool. They secured the agency, and henceforward George Burns devoted his energies to the shipping business.

Service Between Glasgow and Belfast

The six sailing vessels previously referred to were owned by Hugh Matthie, of Liverpool, and his partner, Theakstone, and when the latter died Burns acquired his interest in the business. This shrewd man was one of those who in 1824 formed the first company to run a service of steamships between Glasgow and Belfast. Then, believing that steam would ultimately drive all sailing vessels off the more important coasting routes, he did not rest until the old fleet of sailing ships in the Glasgow to Liverpool service had been disposed of and replaced by steam vessels. The first of

this fleet, the *Glasgow*, left the Clyde on the 13th March, 1829.

In 1878, when the business of the Cunard line was first formed into a limited liability company, all the share capital of £1,200,000 was held by the families of Cunard, Burns, and MacIver. David MacIver, the original partner, who died in 1845, was Burns' keenest competitor before he joined forces with him. George Burns outlived both his partners, dying in 1890 at the age of ninety-five.

Sailing Ships Ousted by Steam

The history of Samuel Cunard is, in reality, the history of the Atlantic liner. He so demonstrated the possibilities of mail- and passenger-carrying steamships that soon all the important shipping companies were discarding their old sailing vessels and competing with each other to build fast liners. Company after company sprang into being, and gradually, as the years went by, the steamship developed into the familiar leviathan of to-day, and the stately sailing vessel became an object of curiosity. Now a new fight is being waged, for oil is challenging the supremacy of steam.

A MAGNIFICENT ROOM IN A FLOATING PALACE



After the establishment of the Cunard route across the Atlantic the progress of the steamship went forward by leaps and bounds. Shipping companies competed with each other unceasingly, striving to turn out better and more efficient vessels. To-day some liners are so luxuriously appointed that, with all truth, they are called "Floating Palaces."

For biographies not included in the Groups see detailed Index

THROWING LIGHT on the DARK CONTINENT

Mungo Park's Journeys into the Heart of Africa, and How He Met His Death in An Attempt to Solve the Mystery of the Niger River

THE farmhouse at Fowlshiels, near Selkirk, where Dr. Mungo Park resided for some years, saw many callers but very few visitors. There were two reasons for this. In the first place, the famous explorer disliked society. He had his family and a small coterie of friends to whom he was warmly attached, but, apart from these fortunate people, he rarely spoke to anyone. The perils of the Dark Continent left him cold and indifferent, but strangers frightened him. In their presence he was reserved, ill at ease, and uncommunicative.

The second reason was that he was a great botanist and lover of nature. The country and its seclusion made an irresistible appeal to him, and when he had finished his work for the day he loved nothing better than to go off by himself, away from the streets and houses, into the solitude of the fields, glades, and shaded lanes.

A neighbour, who was also a particular friend of Park's, called at the farmhouse one day and, receiving the usual answer that the doctor was

"not at home," set out to find him. Intuition—or perhaps it was past experience—led him to the banks of the Yarrow. This friend, who had come over from Ashestiel, was no other than Walter Scott.

Little time elapsed before he saw in the distance the tall, well-knit figure of the doctor. Park was gazing—abstractedly, it seemed—into the swirling stream, and, unaware that he was observed, he bent down after a while and picked up some stones that were lying on the bank. These, at short intervals, he threw into the river, watching carefully the effect of each missile as it struck and sank below the surface of the water.

Scott, greatly astonished that the doctor should engage in such childish proceedings, stood a few paces away for some minutes, quietly

attentive. Soon his curiosity overcame him, and, walking up to Park, he inquired why he had suddenly developed such an unexpected form of amusement. Park smiled. "This was the manner," he explained, "in which I used to ascertain the depth of a river in Africa, before I ventured to cross it—judging whether the attempt would be safe by the time the bubbles of air took to ascend."

THE FAMOUS AFRICAN EXPLORER



Mungo Park, the resolute Scots surgeon, who was the first European to set eyes on and describe the upper courses of the mighty Niger River.

Although some time had passed since Park had returned from his first great journey, his thoughts and ambitions were still centred on Africa. He remembered his hardships, the terrible weeks of his captivity in the land of the Moors, and the long days in the scorching desert, when the grim spectre of death seemed always at his elbow. Yet his passion for travel was such that he yearned to return to the Dark Continent, to face its dangers and make another attempt to pierce its veil of mystery.

His determination to revisit the scene of his early triumphs was not divulged for a long time. But those who knew him best, those who had an opportunity of conversing with him and of

learning something of his remarkable enthusiasm for exploration, felt sure that the uneventful life of a country doctor would not satisfy Mungo Park for long. Sooner or later, they said, he would lead a second expedition into the African wilderness—and they were right. In 1805 Park once more left the shores of England, but this time he was destined not to return.

"I shall set sail for the east," he wrote to the Colonial Office, when starting on the final stage of his journey, "with the fixed resolution to discover the termination of the Niger or perish in the attempt . . . though all the Europeans who are with me should die, and though I were myself half dead, I would still

persevere, and, if I could not succeed in the object of my journey, I would at least die on the Niger."

Nobly did he redeem this pledge. Long after his mission was doomed to failure and he himself realized that there could be but one end to it all, he plodded on, never once faltering or turning back. And before the mighty river Niger, with which his name will be for ever associated, claimed its price, it suffered him to travel 1,000 miles along its course and accomplish something that no man before him had ever achieved.

The strength of character that Mungo Park revealed throughout his distinguished life was moulded in the rough school of a large family. The seventh of thirteen children born to his mother, he was in no danger of being unduly petted, and, in all probability, he owed a great deal to the training he received at the hands of his elder brothers and sisters. All the rough edges and instabilities of his character had been removed long before he emerged into manhood. He matured early.

Always Top of His Class

Born on the 10th September, 1771, at Fowlshiels, where his father prospered as a farmer, Mungo Park acquired the rudiments of learning at home, and was afterwards sent to Selkirk Grammar School to continue his education. From the first he applied himself diligently to his studies and was always at the head of his class, showing a special fondness for reading and botany.

His father intended him to enter the Church, for which he seemed peculiarly fitted by reason of his thoughtful and studious disposition. Mungo, however, had other ambitions. It was to the bodies of men rather than to their souls that he determined to minister, and, with the idea of equipping himself for a medical career, he became a student at the University of Edinburgh at the age of eighteen.

His studies completed, he journeyed to London in search of work, and had the good fortune to gain an introduction to Sir Joseph Banks, president of the Royal Society and a member of the African Association. Sir Joseph, whose friendship for Park ripened into a deep and lifelong attachment, secured for the young doctor the appointment of surgeon in the East India Company's service, and in February, 1792, Park sailed for the East Indies.

His Zest for Travel Whetted

While he was abroad he found many opportunities for adding to his—and not to his alone, but to the world's—botanical knowledge, and, after an absence of over a year, he returned with a stimulated zest for travel, eager to seize the first chance that came his way of embark-

ing on a life of adventure. This opportunity arrived sooner than he had dared to hope.

For some years the African Association had been trying to solve the mystery surrounding the exact situation of the great river Niger, in West Equatorial Africa. Many theories had been advanced as to its course. Some believed it to be a tributary of the Congo; others were quite certain it was an affluent of the Nile; while yet another body of opinion contended that it was an independent river, which poured its waters into a large inland basin.

The Problem Still Unsolved

Expedition after expedition had been dispatched and still the problem remained to be solved. The treacherous climate and the hostility of the natives combined to make the task of exploring that part of the continent one of extreme difficulty and danger, and few of the brave men who had attempted in the past to enlarge the world's geographical knowledge in this respect had returned.

When Park learnt from Sir Joseph Banks that the African Association were contemplating a further expedition with the object of ascertaining the course of the river, he immediately volunteered for the post of leader, and, doubtless on the recommendation of his patron, his offer was accepted. Sir Joseph had the utmost admiration for his ambitious young friend, and not once did he have reason to feel that his confidence was misplaced.

With wonderful new prospects open to him, Park prepared himself assiduously for the responsibilities of his position. For a year or more he studied hard, gathering all the information he could about the region he was to explore. His passion for travelling, his love of natural history, his craving for adventure, and, in a less degree, his desire for the distinction and honour that would be a natural consequence of the success of his mission—all these considerations weighed with him when he volunteered his services, and they served to clothe his undertaking with a fascinating atmosphere of romance.

Starts His First Journey

In vigorous health and with hopes running high, he set sail on the 22nd May, 1795, from Portsmouth, on board the *Endeavour*. Almost exactly a month later he landed at Jillifrey, near the mouth of the river Gambia, and proceeded some distance up the river to Pisania, where he was welcomed by Dr. Laidley, a resident English physician.

For nearly six months Park stayed at Pisania as the guest of this kindly doctor, spending the time profitably in mastering the native language. He fell an early victim to fever, but in December he was ready to embark on his great

adventure, and, with the good wishes of Dr. Laidley and his other friends ringing in his ears, he turned east in search of the mighty Niger, accompanied only by half a dozen negro attendants.

"My instructions," said Park, "were very plain and concise. I was directed to pass on to the river Niger by the most convenient route, ascertain the course and, if possible, the rise and termination of that river, visit the principal towns and cities in its neighbourhood, and then return to Europe." The arrangements for the journey, and the methods by which he was to overcome the many difficulties he was certain to encounter, were wisely left to Park himself.

As he passed from one native kingdom to another in the early stages of his journey, the most mournful predictions were made as to his fate, but Park only smiled. His cheerfulness of spirit and dauntless courage were proof against all efforts to dissuade him from his perilous undertaking.

Crowded Days

Hardly a day passed without his meeting with some amazing adventure. Sometimes the consequences were merely amusing, but more frequently they seriously interfered with his plans, and progress became increasingly difficult as he went on. All his prudence and tact were required to enable him to overcome the hostility and superstitions of the natives. To some he was a spy; to others he was a magician, who had the power of curing all ills; to all he was a curiosity on account of the extreme fairness of his complexion.

On one occasion he was introduced to the numerous wives of an African king, who made many searching remarks about his appearance. "They rallied me with a good deal of gaiety upon the whiteness of my skin and the prominence of my nose," he records. "They insisted that both were artificial.

The first, they said, was produced when I was an infant, by dipping me in milk; and they insisted that my nose had been pinched every day till it had acquired its present unsightly and unnatural conformation!" Another time, his toes and fingers were ordered to

INSULTED BY A HOSTILE MOB OF MOORS



In their rancour against the Christian the Moors forgot the precepts of their faith regarding hospitality to the stranger. Gathering round the hut in which Park had taken shelter, a surging mob hussed, shouted, and abused him. For four months he was constantly ill-treated and subjected to the vilest insults.

be counted to make sure that he was a human being.

His medical skill was not always admired. "Bleeding" a patient was an operation these savages could understand, but when Park once suggested amputating a man's limb as a means

of saving his life, they held up their hands in horror, while the patient was so scared that he made off as fast as he could.

Superstition was very strong with the natives, and not less so with the negroes who formed his party. This gave rise to vexing delays, and on one occasion his servants flatly refused to advance a step farther until a white chicken had been procured and tied to a branch of a certain species of tree, in order to assure the prosperity of their journey. For the first few weeks, however, Park had no reason to

wanted to make his life a misery. On the pretence that he was a spy, Ali, the Moorish chief, had ordered that Park should be arrested and kept in close captivity, while his servants were sent away into slavery. For four months he was constantly ill-treated and subjected to the vilest abuse.

In order to slake his thirst during a long march in the terrible heat of the desert, he was made to drink with the cattle from a trough; the lips of a Christian could not be allowed to pollute the cups of his captors. This and every insult he bore patiently, waiting for an opportunity to escape. "Never did any period of my life pass away so heavily," wrote Park. "From sunrise to sunset was I obliged to suffer with an unruffled countenance the insults of the rudest savages on earth."

Escapes at Last

At length the approach of an enemy force to Jarra gave Park the chance to free himself from the merciless tyrannies of the Moors. With the attention of his captors diverted to meet the new peril, he made off as quickly as he could into the desert, but he had not travelled far when he was overtaken by three men on horseback, who proceeded to rob him of his cloak. Alone in the desert, with nothing to eat or drink, and with no cloak to protect him from rain and mosquito bites, Park may well have imagined that his last hour had arrived.

His position, however, was preferable to the insufferable tortures of his captivity, and, in the hope that he would fall in the hands of friends, he resolutely turned southward and continued his long march across the arid African wilderness.

After three weeks' intense suffering from hunger and thirst he reached Sego, the capital of Bambarra, and, "looking forward, saw the long-sought-for majestic Niger, glittering to the morning sun, as broad as the Thames at Westminster, and flowing slowly to the eastward." Here was recompense for all his trials and hardships. The first and most important part of his mission had been accomplished.

Park's discovery that the river flowed from west to east settled a controversy that had

HAS TO STRIP THE VERY COAT OFF HIS BACK

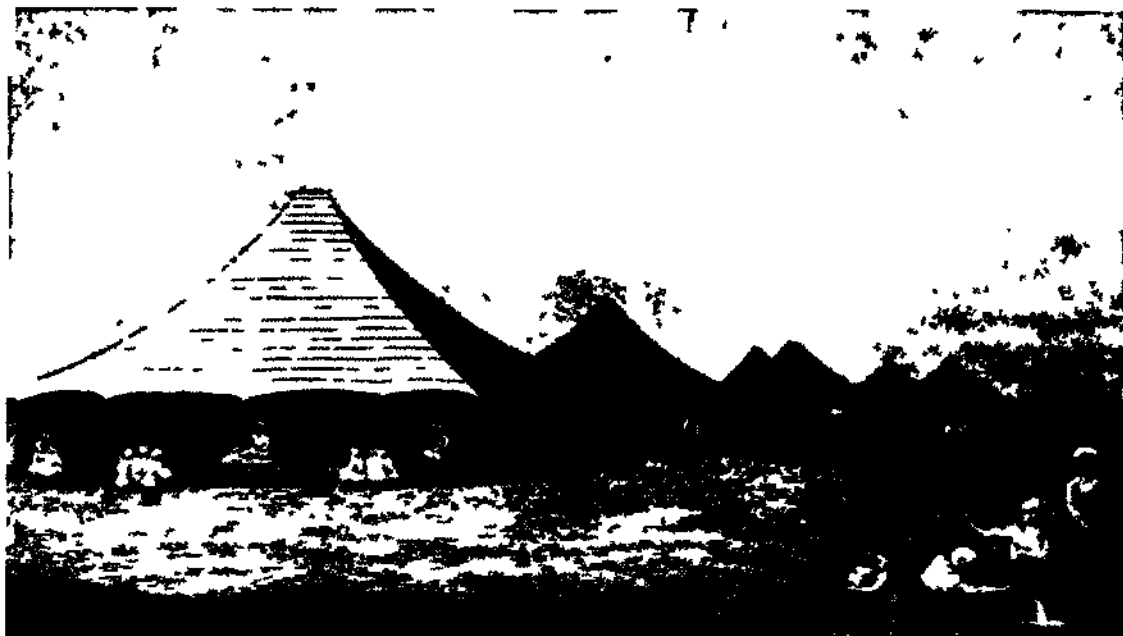


In paying a visit to a king in the Senegal valley, Park brought with him an umbrella and a few other articles for presents. These were accepted readily enough, but Park had also to include the brass-buttoned coat that he was wearing.

complain of the way in which fortune treated him, but he foresaw trouble when he was forced, on account of tribal warfare, to turn northward. This brought him, early in 1796, to Jarra, a town on the frontier of the Moorish kingdom, where his reception was anything but friendly.

The mere fact that he was avowedly a Christian was sufficient to rouse the Moors' hatred, and the added circumstance of his being alone and helpless gave them all the excuse they

A VIEW OF ALI'S TENT AT THE CAMP OF BENOWM



Having suffered much from the depredations of the Moors, Park applied to Ali, the Moorish chief or sovereign of Ludamar, for permission to pass unmolested through his territories. With some difficulty a safe-conduct was obtained, and, attended by an escort sent by Ali, Park eventually arrived at Benown, where Ali was camping.

been raging since the time of Ptolemy. Eager to find out all he could about the Niger, he journeyed for seventy miles along its course to Silla, but by then he was in such dire distress that he was compelled to abandon the idea of further exploration, and he resolved to return to Sego.

So far his life had been mercifully preserved, but the future filled him with apprehension. The rainy season had set in, he was worn out by sickness and fatigue, and he was forced to beg for food among natives who regarded him with suspicion. His tale that he had come to their country to see their great river was disbelieved. Had he no rivers in his own country, and was not one river like another? they asked with wearisome iteration.

Nursed by a Slave Merchant

Warned in time that his life would be in danger were he to return to Sego, Park left the river, and after an arduous journey through a mountainous country—made the more difficult through the torrential rains—he at length succeeded in reaching Kamaha. For weeks afterwards he lingered near to death, but the hospitality and careful nursing of a slave merchant, Karfa Taura, eventually restored him to health. Humanity often exists where one least expects to find it.

Many hundreds of miles of inhospitable country still separated Park from the river Gambia.

To have attempted this journey alone, in his enfeebled state, would have been to court death, so he decided to join the next *coffe*, or slave caravan, that set out from Kamaha to the coast. Park was thus given the opportunity of making a close study of the horrible traffic in human beings that was an integral part of African commerce, and at the end of 18 seven weeks' march across the desert he was sick at heart at the miseries he had witnessed during the journey.

Still Pursued by Misfortune

At Pisania he was welcomed by Dr. Laidley as "one risen from the grave," and five days later he embarked on a slave ship bound for America. Even at this late stage misfortune pursued him in the shape of bad weather and mountainous seas, which drove his ship to the West Indies. At length he was able to board another ship at Antigua, and reached Falmouth on the 22nd December, 1797. He had thus been absent for two years and seven months, and, greatly anxious concerning his family, of whom he had received no news for over two years he lost no time in making for London.

Shortly after day-break on Christmas morning, Mungo Park's brother-in-law made his way to the British Museum to attend to some little matter of business. With his mind dwelling, in all probability, on the forthcoming festivities, he entered the Museum gardens. Early as he

was, he was not the first human being to enter the gardens that morning, for not many paces ahead stood another man, tall, with clean-cut features, but grievously thin. The two men drew near to one another, half-stopped, stared incredulously for a moment or two, and then a startled cry of recognition burst simultaneously from their lips.

In these dramatic circumstances did Mungo Park and his brother-in-law meet once again, the former to be welcomed as one returning from the dead, and the latter to be greeted as a long-lost friend on whom the explorer had never expected to set his eyes again.

Park's unexpected return and the story of his wonderful achievement were greeted with great enthusiasm by the African Association. In response to many requests he immediately started compiling a narrative of his discoveries and travels—a task that occupied him for fifteen months.

Publishes the Account of His Travels

When, in the spring of 1799, his book was published, it achieved popularity with every section of the community, and there was a great demand for it. Still regarded as one of the best travel books ever written, it was distinguished by its easy literary style, its mass of descriptive detail, and its wealth of graphically told incidents and adventures. In addition, of course, it was a work of great geographical importance.

For two years Park was able to enjoy a well-deserved holiday on the profits from the sale of his book. Then, faced with the necessity of earning his living once more, and of supporting a wife and family—for he had married Miss Anderson, a Selkirk lady, on the 2nd August, 1799—he started practising as a doctor at Peebles.

It was not long, however, before his passion for travelling again caught him in its toils. The life of a country practitioner did not suit him. It was too tame, and, withal, provided him with a poor living. When, therefore, in 1803, he heard that the Government intended sending out a further expedition to the Niger, he left the comfort of his hearth, hurried to London, and volunteered his services once more for exploration work in Africa.

Equipping Himself for His Journey

As soon as his offer had been accepted, Park began his preparations for the journey, but a number of delays occurred following a change of Government, and for a long time it was doubtful whether the expedition would ever be dispatched. While he was waiting for definite instructions, Park spent his time profitably in learning Arabic and improving his knowledge of astronomy. More than a year of indecision,

suspense, and anxiety passed, but at last the explorer received his orders, and at the end of January, 1805, he was heading once more for the coast of Africa.

His chief mission on this occasion was, in the language of the Colonial Office, "to pursue the course of the river Niger to the utmost possible distance to which it can be traced, and to establish communication and intercourse with the different nations on its banks." None knew better than Mungo Park the difficulties confronting him. None realized more clearly the terrible risks he and his party would have to run before even they reached the Niger.

Undismayed by Difficulties

The journey afterwards along its course would be a new adventure, but his previous experience gave him no reason to hope that it would be accomplished without opposition on the part of the natives. Yet the gallant explorer showed no fear. Of the forty-four Europeans who, with a number of negro attendants, left for the interior of the continent on the 27th April, 1805, none, outwardly at least, was more cheerful and confident than Park.

At the outset, Park took a tremendous risk, a risk that events afterwards proved to be fatal to the success of the expedition. For once his characteristic prudence seems to have deserted him. If the past had taught him one thing more than any other, it was that travelling in Africa in the rainy season was one of the most undesirable and dangerous experiences that could be imagined.

Sooner, however, than hold up the expedition for several months, he set himself the impossible task of reaching the Niger before the rains fell. He failed, and by the time he reached the river, only a quarter of his little force remained. The other thirty-three Europeans, including Scott, the draughtsman, who had accompanied Park from England, had perished.

Obstacles Human and Otherwise

Many and varied were the causes that had contributed to this melancholy state of affairs. Park's chief aim from the first was to maintain a good rate of progress, but his path was anything but smooth. Hindrances and delays occurred so frequently as to become monotonous. Every time the party entered a new tribal area, they were held up, interrogated, and refused a passage until the king had been given lavish presents. And the natives were not the only obstacle. One day a huge swarm of bees suddenly attacked them, scattering the animals and severely stinging man and beast alike.

On another occasion, Isaac, a native priest, who was acting as guide to the expedition, was seized by a crocodile as he was wading across a river, and only his remarkable presence of

mind preserved his life. The crocodile tried to pull the native below the surface of the water, but a lightning thrust with his hand into the animal's eyes defeated the effort. The crocodile a little later made another attempt, but, meeting with the same painful treatment, he disappeared.

The menace of attack from wild beasts was always with them. One night a pack of wolves made a surprise assault on their camp, and not long afterwards Park was alarmed to discover three lions marching abreast towards them. A cool head and a steady rifle frequently stood alone between the explorer and death. Not, however, until the arrival of the hurricanes, presaging the immediate approach of the rainy season, did Park encounter his worst troubles. Then he had reason to deplore the fact that he had not been more careful in his choice of personnel for the expedition.

Personnel of the Party

The party had been recruited chiefly from the military garrison at the tropical station of Goree. It was hardly to be expected that these soldiers would show the same zeal, determination, and endurance in face of hardship as were displayed by Park and his colleagues Scott and Anderson, who had accompanied him from England.

The treachery of the natives, the constant threat of attack from wild beasts, the shortage of water, the difficulties of transport over the wild, mountainous country, and, finally, the sickness and sufferings brought on by the tropical rains, affected the nerves of men who were accustomed to fighting an enemy they could see. In the space of a few weeks a well-disciplined, healthy force was turned into a disordered and depleted rabble.

Still Park did not despair. For weeks he was engaged in a hopeless struggle against insidious disease, and even when, in the end, he himself

fell ill, he contrived to do the work of a dozen men. Nothing could have been more inspiring to that unfortunate little band of explorers than the heroic and unselfish example of their leader. At night Park was frequently too

MUNGO PARK'S LAST STAND AGAINST THE NATIVES



At the Busea rapids Park was attacked by a band of savages, armed with lances, pikes, bows and arrows, and stones. Having defended themselves for a long time, Park and his companions jumped into the water and were drowned.

weary to write up his journal, and the entries grew more and more brief.

On the 6th July he wrote: "All the people either sick, or in a state of great debility, except one, bought all the milk I could find." A later entry tells, in simple unaffected language, the superhuman work which Park came to look upon as a daily duty. "I found Mr Anderson

lying under a bush apparently dying. Took him on my back, and carried him across the stream, which came up to my middle. Carried over the load of the ass which I drove. . . . Found myself much fatigued, having crossed the stream sixteen times."

Their arrival at the Niger brought them temporary relief from their sufferings. As soon as he reached Bambakoo, Park launched his two canoes and sent Isaaco to interview the king and obtain facilities for travelling through the Niger territory. Rather reluctantly the

With his little force reduced to a native guide, three negroes, and four Europeans, one of whom was mad, Park started on the last stage of his travels in November, 1805. Rarely has history revealed such another example of perseverance and pluck as Park showed in embarking almost alone on such a hazardous undertaking. Far from desponding, he intended to go on until he dropped, pledged to discover the termination of the Niger or perish.

An entry, dated the 16th November, "All ready—we sail to-morrow morning or evening,"

concluded his journal. His last letters, written the same month, and all breathing hope and confidence, reached home; and then—silence, a long silence that could mean only one thing.

Solving the Mystery

Rumours of his death reached England in the following year, but it was not until 1810 that any official attempt was made to clear up the mystery surrounding the explorer's fate. Then Isaaco, who had left the expedition after it had reached the Niger, was commissioned by the Government to make an exhaustive inquiry into the circumstances that had led to Park's death. Isaaco, who was absent nearly two years, was fortunate enough to meet the native guide who had accompanied the explorer on the final stage of his journey, and from him he received a full account of what happened after they left Sansandig. It was an epic story.

Day after day they were confronted with difficulties from which there seemed no escape. Finally Park reached Bussa, having explored the river for approximately 1,000 miles of its length. Here, through the treachery of a native chieftain, they were attacked by a large band of savages, and Park and his companions jumped into the river and were drowned. Only one negro and the native guide survived.

[See "Travels in the Interior Districts of Africa," by Mungo Park (2 vols., 1816); and "Mungo Park and the Niger," by J. Thomson (1890).]

SETTING OUT ON HIS GREAT ADVENTURE



After staying about six months at Fisanua, a British station on the Gambia, Park bids farewell to Dr. Laidley, the resident physician, and starts with his little party on his perilous journey into the unknown interior. Within two years he returned, to be welcomed by the kindly doctor as "one risen from the grave."

king provided an escort as far as a place called Sansandig, where Park remained two months, trading with the natives and constructing a flat-bottomed boat for the next stage of his journey. About this time Park suffered a severe loss in the death of Alexander Anderson, his wife's brother, who had been ill for some months.

"No event during the journey ever threw the smallest gloom over my mind, till I laid Mr. Anderson in the grave," he wrote. "I then felt myself as if left a second time lonely and friendless amidst the wilds of Africa."

For biographies not included in the Groups see detailed Index

A BUILDER of FLOATING PALACES

How the Rare Combination of Practical Sense and Imagination in William James Pirrie Led Him to Become One of the World's Greatest Shipbuilders

WILLIAM JAMES PIRRIE made a name for himself that was in many ways unique in the world of industry and commerce. His ideas long dominated many spheres of human enterprise, and his productions acclaimed the success of his work in every part of the globe.

Son of James Alexander Pirrie, of Clandeboye, Co. Down, and Eliza Montgomery, of Dundee, Co. Antrim, he was born on the 31st of May, 1847, at Quebec, where they were residing temporarily owing to the father's shipping interests requiring his presence in Canada at the time. After the child's birth his parents returned to the North of Ireland, where their son grew up in the midst of a large circle of family relations on both his father's and mother's side. His birth and infancy have been a subject of much romance. His father, Mr. Pirrie, subsequently having to visit New York on business, died there; and the mother, being deprived so soon of her husband's companionship, returned for a time to the home of her parents, where she devoted her life to the upbringing of her two children—a daughter who was the elder, and her son William James who was two years younger. During the early years of his life he and his sister had the unceasing care and wise instruction of their gifted mother, and spent the happiest of childhoods.

Having the advantage of being brought up in the country, his mother and maternal grandparents encouraged in the lively boy a love of nature and country pursuits. It is therefore very natural that in the last years of his life—in his beautiful country home in England—he should have had reawakened in him the love for such recreation from the calls of his great

industrial work, which frequently occupied no fewer than sixteen hours a day. In after life Lord Pirrie often referred with glowing enthusiasm and filial love to the inestimable debt he owed to the example and the practical, moral and religious guidance of his mother.

VISCOUNT PIRRIE



Youthful in spirit, simple and unostentatious in habits, kindly and genial in manner; a man whom other men delighted to love and serve. He was not only a great shipbuilder and engineer, a great administrator and a great patriot; he was a great gentleman.

It is recorded that his mother wrote a little book of maxims for his edification, a perfect treasure of maternal love and wisdom. It is safe to say that when Lord Pirrie, many years ago, uttered the following statement he was thinking of the one to whom he owed so much:—

"Were I asked to give a message to the youth of the present day, as to the virtues that make for success in commercial life, and the faults and vices leading to life's failures, I would put first of all, as the chief corner-stone, this: Respect your parents' wisdom and good advice. Follow it closely as a sacred duty. A mother's saintly character, her prayers and earnest exhortations to virtuous living and noble deeds, should be cherished as a Divine favour. At the outset of his career a young man could not do better than resolve that nothing should enter into his life of which his

mother would not approve, or which would cause her pain. Having done this, he may, I think, rightly resolve that it shall not be his fault if he does not make his way in the world."

In view of the pre-eminent position attained by Lord Pirrie in the shipbuilding world, it is interesting to know that not only his father but his grandfather also was connected with shipping. His grandfather, William Pirrie, whose memory Lord Pirrie always revered, was one of the leading men in the shipping trade in Belfast, and for over thirty years the inspiring

figure of the Belfast Harbour Board. It was, therefore, quite natural that in his choice of a profession young Pirrie should have been influenced and encouraged by family traditions to learn shipbuilding. It was a momentous decision, for while it is certain he would have made his mark in any sphere of activity, we could not imagine British shipbuilding to-day bereft of the powerful influence which he exerted on its progress and development during a life of unprecedented application and vigour devoted to the interests of this great national industry.

Lord Pirrie was educated at the Belfast Royal Academical Institution under the celebrated head master, Mr. John Carlisle, M.A., where he showed in his earliest years great mathematical ability. At the age of 15, in 1862, he became a pupil in the firm of Harland and Wolff, and such was his progress that he rapidly rose from one position to another, until on the 1st July, 1874, he was admitted to partnership at the age of 27. The firm, when he entered it, occupied a very small site and employed but few men. Belfast, however, was a rising town, and its progress in subsequent years was greatly accelerated by the development and success of Harland and Wolff, first under its founders and then more rapidly under Lord Pirrie's genius as he rose to be the chief controller of its destinies, his career being one of uninterrupted success. The wisdom of never despising the day of small things was exemplified in Lord Pirrie's case, for the modest proportions of the establishment in which he entered on his profession enabled him to acquire knowledge and experience quickly both in the works and the offices, so that he speedily learned all branches of the technical side of shipbuilding. At the end of seven years he began to design ships, introducing into his drawings improvements which were at once recognized as far-reaching. Apart from this marked ability, he proved his worth again and again by his wonderful initiative and conscientiousness and by his extraordinary powers of memory.

An illustration of the abnormal development of this last faculty in him may be mentioned here, although the incident occurred at a later stage in his career. He made a sketch of plans for an extension to the Royal Victoria Hospital, Belfast, an institution in which he and Lady Pirrie took great interest. The plans were not used at the time, but twenty-five years later the question of the extension arose again and the original sketch could not be found. Pirrie, who was on the committee, quickly made another. When the first sketch was later discovered it was seen that Pirrie's second

one, drawn entirely from memory, corresponded in every detail with that which he had drawn a quarter of a century before.

A Valuable Combination

Pirrie's genius consisted in the rare combination of practical, hard-headed sense with imagination. He saw visions beyond the draughtsman's board—beyond Belfast. Having grasped the essentials of his trade he began to show signs of restlessness. His employers quickly saw that travel was necessary in order that the groping imagination of their brilliant young draughtsman should find concrete material upon which to work. They sent him abroad to study the methods of foreign ship-builders. The wisdom of this step, and its justification, is shown by the fact that when Pirrie returned to Belfast he had outdistanced his employers in knowledge and in vision of the possibilities of the future. They took him into partnership.

Increase in Steamship Tonnage

From that time onwards, although his name was not incorporated into the firm, Pirrie was its controlling mind. Thus, after twelve years' service, the pupil became the master. He brought to his work not only skill and knowledge but wide vision. He increased the tonnage of the steamship far beyond what was then considered to be the limit, and at the same time improved the serviceableness for passenger purposes. Not only the speed and seaworthiness of the modern liner but its amenities and its beauty of form are due to Pirrie's share in its construction. Every new ship that came out of the Queen's Island yard, Belfast, bore the stamp of his original mind.

Under his management the firm of Harland and Wolff quickly extended its activities. Pirrie himself personally obtained most of the enormous orders which made the growth of the firm possible.

Building for Several Famous Lines

By the time he entered upon the second and even more romantic part of his career, Pirrie was building ships for the White Star Line, the Glen Line, the Royal Mail Steam Packet Co., African Co., the P. and O., the Elder Dempster, the Union-Castle, Atlantic Transport, Leyland, Pacific, Aberdeen, Hamburg-American, Holland-American, the Red Star and other lines. Among some of the early liners that he built were the *Oceanic*, *Atlantic*, *Baltic*, and *Republic*, all from 3,000 to 4,000 tons. A comparison between these early vessels and the *Olympic* of 46,439 tons, shows the remarkable progress made in the science of ship design.

In course of time the boy who carried his mother's maxims in his pocket became the

head of an organization controlling 50,000 men and a weekly wage bill of £200,000. To-day the firm of Harland and Wolff has branches in Glasgow, Greenock, Liverpool, Southampton, and London, and the two acres which its original establishment covered grew within the forty years of Pirrie's management to 500 acres.

The Belfast works at Queen's Island alone occupy an area of 230 acres. Many of the world's greatest liners have been cradled here, and the firm's machinery is specially adapted to the production of the heaviest tonnage and the greatest horse-power. The capacity of the works is 200,000 gross tons annually, and, at times of pressure, 21,000 men are employed.

It was as an organizer upon a wider scale that Pirrie was to prove his greatest worth to the nation. His close association with all the great steamship lines placed him in a position of enormous power, and he used his advantage and his genius for friendship at a moment in the history of British shipbuilding when its future was seriously jeopardized by foreign competition. In America, shipbuilders were able to lay their hands upon large supplies of oil. Pirrie early saw that this was one respect in which British shipbuilding was placed at a serious disadvantage.

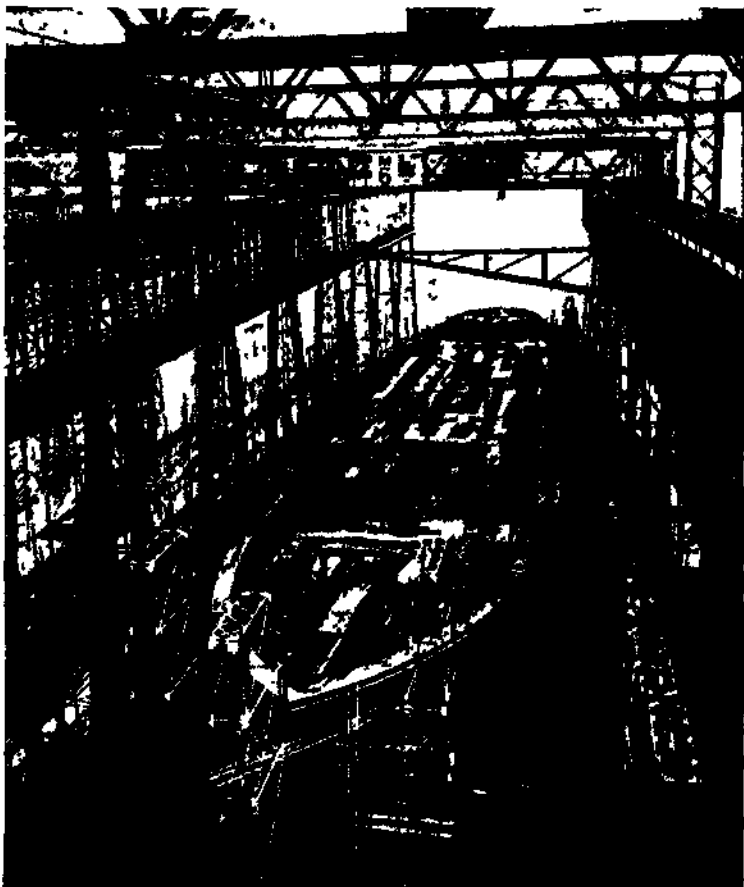
Adoption of Diesel Engine

He had accepted large orders for fleets of motor-boats, and he was doing all that he could to develop the use of the Diesel oil engine. The situation became critical, and Pirrie, seeing that nothing else was of so much importance as the solution of the oil problem, made a long tour of the South American republics. When he came back he had interviewed all the big oil magnates and arranged for a satisfactory supply of oil. By sheer force of personality, combined with endless tact and shrewdness, he had overcome a difficulty which many of the most prominent shipowners in England had hitherto regarded as insuperable.

The danger of competition from German shipping was even more serious. Herr Ballin, whose career in Germany in many respects

resembled that of Pirrie in Britain, had induced his Government to support him. The result of this was that for some time the German shipyards were able to turn out bigger and faster ships than the Harland and Wolff firm. Pirrie, who in 1905 had built for the German-America line a liner bigger than any he had previously built for a British line, suffered

THE EARLY DAYS OF A STATELY STEAMSHIP



It was the genius of Lord Pirrie which made it possible for the shipbuilding firm of Harland and Wolff to build great ships like the *Doric* shown here in the course of construction. It was built in 1923 for the White Star Line.

the humiliation of seeing his rival rapidly gain ground.

For a while it looked as though German shipping must triumph, and then Pirrie again came to the rescue. He pulled his country out of the difficulty entirely by his own individual exertions. He saw that the one thing necessary was co-operation, and he invited some of the leading shipping firms in the country to form a gigantic combine which safeguarded the interests of British shipbuilders and shipowners, and presented a formidable bulwark against foreign competition.

It is safe to say that nobody but Pirrie could

have broken down the barriers of prejudice and induced so many individuals of widely different types to work harmoniously for their common good.

Honours crowded upon Lord Pirrie as it became apparent that he was not only the biggest man in shipping circles but also a distinguished citizen, a wise counsellor upon a wide range of subjects, and a loyal subject. Not content with his triumphs as a shipbuilder and oil magnate, he entered the field of finance and became one of the most active directors on the board of the Midland Bank, Ltd.

In the year 1879 Lord Pirrie married Margaret Montgomery, daughter of John Carlisle, M.A., of Belfast. She shared all his travels, and closely associated herself with his great works.

Lord Pirrie and Lady Pirrie had the honour of being appointed the first freeman and free-woman of Belfast, of which city Pirrie was twice lord mayor. The Royal University of Ireland conferred on him the degree of LL.D., and the Dublin University the degree of D.Sc. He was raised to the peerage in 1906, and the occasion of His Majesty's visit to Belfast to open the first Parliament of Northern Ireland in 1921 was chosen as the most fitting one for the bestowal upon its great citizen of the honour of a viscounty. He was His Majesty's Lieutenant for the County of the City of Belfast, and a Knight of St. Patrick.

His terms of office as mayor of Belfast were marked by many striking municipal enterprises. Lord Dufferin said of him: "He is a man who by his talents and indefatigable exertions has so stimulated the activity of this town that he has lifted it from its former comparatively inferior position to that of being the third great commercial city in the whole Empire."

Indebtedness to Others

It was Goethe who said that no really great man could be guilty of ingratitude. There are few men, however, who go out of their way to acknowledge their indebtedness to others for at least a considerable part of their success in life. Lord Pirrie was one of these rare men.

On the occasion of the unveiling of a memorial to the men from Queen's Island works who fell on active service, he paid the following tribute to Lady Pirrie: "My wife was my inspiration when I was young, and after forty years of married life continues to be so, and has been in every sense of the term a real helpmate. She has never spared herself, and has supported me in the various undertakings which have been essential in the expansion of Harland and Wolff's works."

In 1918, when Lord Pirrie had reached one year beyond the three score and ten, he em-

barked upon an undertaking that might well have taxed the strength and endurance of a far younger man. But the position in question could only have been filled by him, and he did not shrink from it.

This undertaking was nothing less than the complete reorganization of British merchant shipping during the later stages of the World War. How necessary was the appointment of a man of Lord Pirrie's calibre only slowly became apparent to those in authority. For a long while the havoc wrought by the U-boats had been greater than the Admiralty dared to admit.

Lord Pirrie knew the gravity of the situation, and from the outbreak of war he had done his best to cope with it. He concentrated all the resources of his mighty organization upon the rapid construction of naval vessels of all kinds, from the largest cruisers and monitors, to destroyers, etc. At the Harland and Wolff repairing works on the Mersey alone 350 Admiralty and 2,000 merchant vessels were dealt with, all the repairing bays being worked at full pressure.

A Confusion of Issue

The wastage, however, could not be made good fast enough, owing to a serious confusion of issue between the Admiralty and the Shipbuilding Advisory Committee. The chief concern of the former was to push forward the construction of warships, while the latter body tried to replace the losses to merchant shipping. As a result of the separate workings of these two authorities, orders were given to the wrong firms, and while some shipyards were overcrowded others were not being used to full capacity.

By February, 1918, it was reported that the number of ships built for the past three months amounted to less than half those destroyed by the enemy. At one time the losses trebled the output.

At this juncture a letter appeared in the Press signed by a well-known shipowner. "Lord Pirrie," he wrote, "is far and away the biggest man in the shipbuilding world. He has done the biggest things. He is noted for getting things done. He is one of our greatest national assets, and it would be nothing short of criminal negligence in the present crisis not to enlist the services of such a man. If Lord Pirrie can be prevailed upon to come to his country's aid and take control of the industry, we shall succeed in making good our losses with the least possible delay."

Controller of Merchant Shipbuilding

The result of that letter was a sudden and dramatic decision. Lord Pirrie was appointed Controller-General of Merchant Shipbuilding,

and given direct access to the departments of the Prime Minister and the War Cabinet. The members of the Shipbuilding Advisory Committee resigned.

Merchant shipbuilding thus came under the control of a single man, for Lord Pirrie brought no staff with him to the Admiralty, and he quickly proved himself to be the one man capable of obtaining the utmost out of a mighty undertaking. By the end of March, 1918, the record monthly production of 161,674 tons was announced. Three months before the figure had been only 58,568 tons.

Lord Pirrie developed the idea of the standard ship, which did so much to maintain Britain's threatened supremacy of the seas in those days when everything depended upon it. It was he who invented the fabricated N-type of merchant vessel, which, owing to its extremely simple design, could be built in a phenomenally short space of time.

Under Lord Pirrie's control at the Admiralty there was no more waste of energy. He knew exactly what each separate shipyard could do and allotted orders accordingly. His publicity campaign stimulated the workers and restored confidence among the people. He paid visits to the shipyards throughout the country and satisfied himself that no unnecessary strain was being placed upon the energies of the workers.

Aircraft Construction

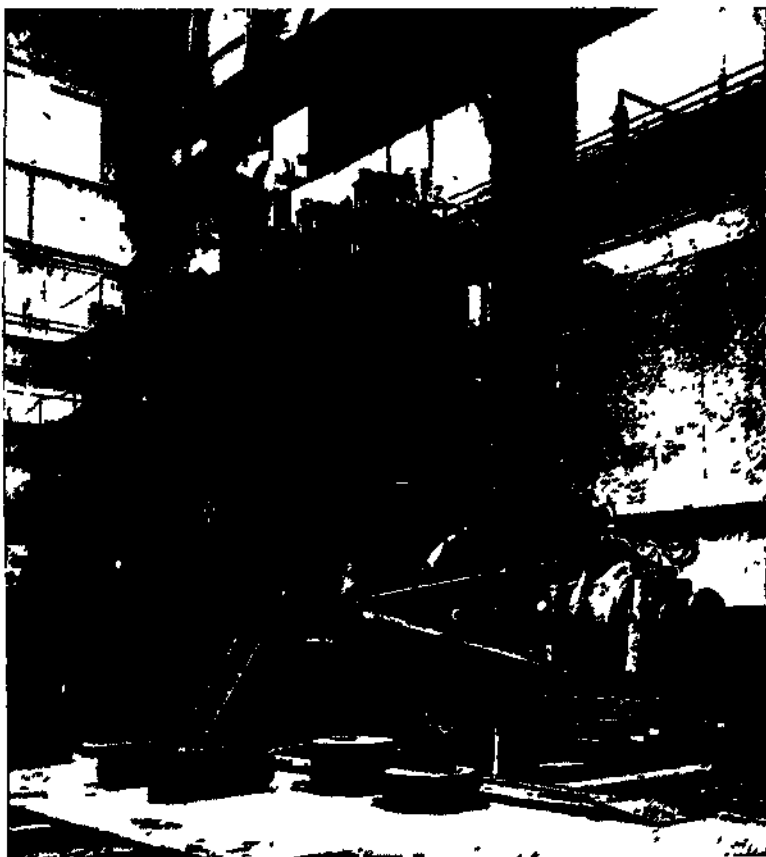
It was not only as a shipbuilder that Lord Pirrie proved his worth during the war. The British Government, recognizing the organizing ability that had averted a serious crisis in one sphere of activity, decided to enlist his aid in bringing about an increase in the supply of aeroplanes. Lord Pirrie was asked to do what he could, and he instantly brought his elastic powers to bear upon a problem which, although in many ways similar to that which he had solved, entailed the swift mastery of a new technical knowledge.

The resources of the Harland and Wolff wood-working departments were soon turned

on to aircraft production, and Lord Pirrie himself superintended the erection of a huge aerodrome near Belfast for the erection and testing of large aeroplanes. Like everything else that the great organizer undertook, the result was an immediate improvement, both in production and efficiency of workmanship.

War weariness was a sensation unknown to this tireless veteran. At the moment when

A MODERN TYPE OF MARINE OIL ENGINE



The oil-burning vessel found a staunch champion in Lord Pirrie. This is one of the 6-cylinder Diesel engines that were installed by his firm in the Babby Line motor ship, the *Dorsetshire*.

the armistice was declared and everybody flung themselves into rejoicing and much-needed relaxation, Lord Pirrie hastily summoned a meeting of the Harland and Wolff directors in order to decide upon plans for the return to production on a peace basis.

"Peace is a question of tonnage," was the apt truth which he impressed upon the minds of the workers in the shipyards. He did not mince matters. In his famous manifesto issued in 1918 he drew attention to the fact that during the war Britain had lost nine million tons of shipping, while Allies and neutrals had lost six million tons. As a result of this the

amount of the world's shipping had dropped to considerably more than fifteen million tons below the tonnage which would have existed had there been no war.

In graphic language Lord Pirrie pointed out that there were millions of troops waiting to be transported to their homes, and that thousands of tons of cargo, which had been held up for four years, were awaiting transportation. The shipping of these was necessary, not only for the reconstruction of British industries, but in order to provide work for millions of workers about to be reabsorbed into pre-war occupations. Perhaps there was never a more timely warning. Pirrie himself worked until the very end of his life, for his death, on the 7th June, 1924, occurred on board ship shortly after passing through the Panama Canal, on the way back from a tour undertaken in order to arrange with the South American authorities for the reception of new and larger liners then being built by Harland and Wolff. He caught a chill and pneumonia followed.

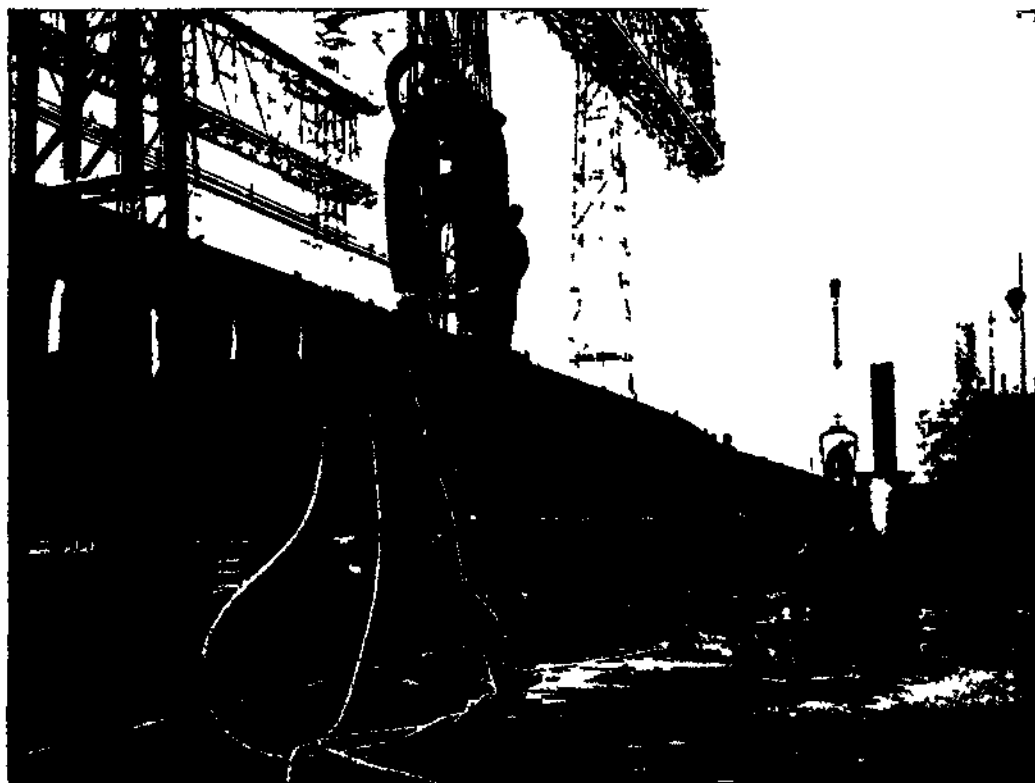
During the last stages of the illness his bed was brought on deck and a long postponed wish to see the marvels of the canal was thus

gratified. His last words were to inquire whether the ship upon which he lay, the *Ebro*, would reach New York in time to catch the *Olympic*, his own liner, on her return voyage to England.

At the time of Lord Pirrie's death there was probably no other man connected with shipping who possessed such a wide and accurate knowledge of ships and the commercial and the financial aspects of shipping. He was intimately acquainted with all the ocean routes vital to the development of British enterprise, and he was the one man in England whose advice upon the possibilities of trade and the type of ship best adapted to various purposes could be absolutely relied upon.

There have been few men of this generation, or any other generation, who so thoroughly appreciated and carried out the injunction, "whatsoever thy hand findeth to do, do it with all thy might." His life was given up to labour, and he did not cease even when age and the fulfilment of his great ambitions might have provided him with an excuse to do so, but gave the reserves of his vast energy to the cause of upholding Britain's supremacy on the seas.

A MACHINE THAT DOES THE WORK OF MANY LABOURERS



In 1911 Harland and Wolff built the triple-screw S.S. *Olympic* (46,439 gross tons) for the White Star Line. All the machinery used in Lord Pirrie's yards was of the latest pattern. An example of the up-to-date methods adopted is this hydraulic riveter, which is seen at work on the vertical keel plate of the *Olympic*.

For biographies not included in the Groups see detailed Index

A STORY-TELLER OF THE OLDEN WORLD



Æop holds his audience enthralled. Young and old heard him with equal zest. The boys and girls of long ago loved his tales because he made the animals talk. Their elders delighted to listen to this story teller of the homely face for beneath the sprightly conversation of the birds and beasts in his fables they perceived much sound advice and much shrewd comment on human faults. Æop probably never wrote down his fables. For long they passed by word of mouth. But at length scholars put them into the form we know to day.

TELLERS of FABLES and FAIRY TALES

The Story of Hans Andersen, Æsop, and the Two Brothers Grimm, Whose Works Have Brought Happiness to the Children of All Nations

A COMPANY of players from the Theatre Royal, Copenhagen, were performing in a hall at Odense, a small town on the island of Funen, in Denmark. The occasion was an unusual one, for theatrical entertainments were rare in that out-of-the-way place, and everybody who could afford to pay for a seat had come to see the famous Copenhagen players.

Suddenly a loud tittering broke out among the audience. The curtain had risen on an outdoor scene with a crowd of people thronging the stage. Amongst these were some local people recruited for the occasion as "supers." It was amusing to recognize familiar faces in these strange circumstances.

One figure in particular aroused merriment and surprise. It was so familiar and so amusing in any circumstances. Its appearance on the stage made it seem doubly ludicrous.

There was no mistaking that ungainly youth, tall and lean, with yellow hair and unusually long arms, whose face was anything but handsome, and in whose big wide-staring eyes there was nearly always a look of startled amazement. It was Hans Christian Andersen, the cobbler's son, who lived with his widowed mother, a washerwoman, and who spent his days playing with a toy theatre because he was such a dunce at school.

Already he had earned the title of the "comedy-writer," but nobody thought the queer youth, with his shambling gait and awkward ways, would ever make his way in the world. People laughed at his ambition to become an actor, and it was a surprise to them that he had succeeded in obtaining an engagement even as a humble "super."

Hans had not been engaged at all. He had crept on to the stage unawares and mingled with the crowd, hoping not to be noticed. He

was so fearful of ridicule and of being told by the stage manager that he was no good, even for "walking on." At the same time he was so anxious to know what it was like to be on a real stage during the performance of a play by real actors. He screwed up his courage and won his experience at the cost of much subsequent chaff.

The only thing that Hans could do was to tell stories. He made them up in his head and told them to children younger than himself, using their language so that they would understand them better.

He could weave a story out of almost anything—a flower by the roadside, or even a stone. His head was full of fantastic ideas about fairy kings and princesses, mermaids and witches. The world of fabulous things seemed to be more real to him than that of everyday circumstance.

People shook their heads and said that Hans had been born to trouble and would never succeed in escaping from trouble. His parents had married very young, and his father had been a sickly man. It was a bad business.

Hans Christian Andersen was born at Odense on the 2nd April, 1805. His father, who had been a cobbler, died when Hans was about eleven

years old. The widow, with the help of friends, managed to bring up her child. She was a woman of strong personal character, superstitious and ignorant, but it was probably from her that Hans inherited his imagination. All through his life he remembered and quoted her sayings and tales of bogies and witches.

Hans went to school, but his mind refused to absorb the ordinary curriculum. He spent most of his time on the floor of his mother's tiny cottage, manipulating the puppets in his toy theatre and making them act the plays of Holberg and Shakespeare. He read and recited

WILLIAM AND JACOB GRIMM



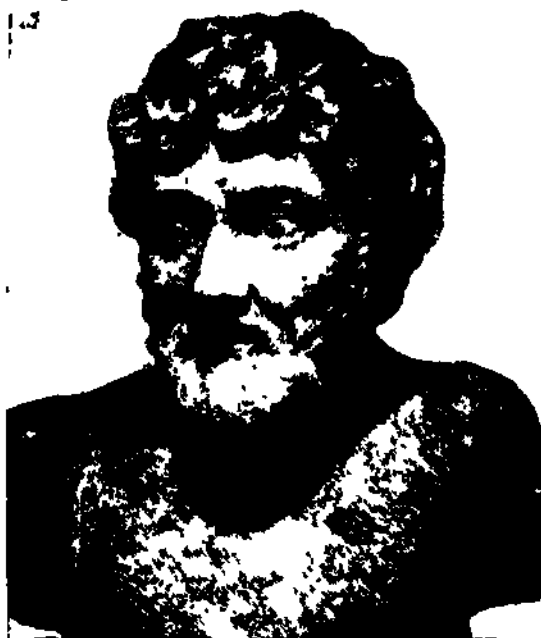
The beautiful fairy stories collected by the two German brothers, William and Jacob Grimm, still give countless hours of happiness to the children of all nations.

poetry and made up verses and plays. Nobody in Odense saw that he had gifts which only needed development. He talked chiefly to children, and to them it was not necessary to confide his secret ambitions.

His single night's experience as a "super" decided him to become an actor. Soon afterwards, in his fourteenth year, he left his native town and made his way to Copenhagen. He went straight to the directors and told them that his mother wanted him to become a tailor but that he had decided to go on the stage.

The directors roared with laughter. They thought Hans looked and spoke like a lunatic. Besides, he was so thin and uncouth. They told him that he would be no use as an actor.

THE SLAVE WHO RECITED FABLES



Though most of the details concerning the life of Æsop, the Greek man of fables, are obscure, there is evidence to support the belief that he was born a slave.

Hans turned sadly away. It happened, however, that one of the theatre poets, Friedrik Hoegh Guldberg, overheard the interview. Looking keenly into Hans' unbeautiful face, he was struck by the expression of genius in the boy's burning eyes. He pleaded with the directors, with the result that they promised to do something for him.

But many weeks passed before "something was done" for Hans, and he had not told the directors that he was alone and penniless. He wandered about the streets of Copenhagen, homeless, friendless, and starving. Perhaps, if he had not done so, he would never have learned that compassion for the wretchedness of others

that became so marked a feature of his stories. He must have come very near to death, for he had no practical ability and could not turn his hand to anything except verse writing.

At last the directors of the theatre redeemed their promise and accepted Hans as a pupil. But their original estimate proved only too true. Hans could not act at all. After a while his voice broke, and he was unable to sing in the chorus. It became obvious that there was no career for him on the stage.

As a poet, however, he was already beginning to attract a little attention. Aided by his friend Guldberg, he obtained a grant from King Frederick VI, on condition that he concluded his much neglected education.

An Unwilling Pupil

He went to the grammar school at Slagelse, but he was still a very backward and unwilling pupil. There followed five of the darkest and bitterest years of his life. His eccentricities made him the butt of the class, and his incompetency aroused the fury of masters who could not understand his nature, and regarded his story-telling and verse writing as deliberate waste of time.

Before he went to Slagelse Hans Andersen published his first book of verses, "The Ghost at Palnatoke's Grave, and Other Poems" (1822), which was highly praised by the critics. But he was still unable to satisfy his patrons that he was "educated" in the ordinary sense of the word. And so the unhappy poet remained at school, forcing himself to master arithmetic and other subjects that were equally uncongenial.

In 1827 he was allowed to return to Copenhagen. He tried every form of literature without success. It had not yet occurred to him that in the stories he had invented as a child he had the material which would bring him fame and fortune. He wrote poems, novels, books of travel, and plays. One or two of the plays were afterwards performed with some success at the Theatre Royal, Copenhagen, particularly a fairy drama, *More than Pearls or Gold* (1849).

Disappointed in Love

In 1831 Andersen's health broke down as the result of a disappointment in love and the adverse criticisms of a book of poems, "Fancies and Sketches," published in that year. He was ordered to travel, and from 1833 onwards, aided by state grants, he became a wanderer in strange lands, carrying with him an extraordinary collection of books, papers, manuscripts, and personal bric-à-brac. "He had a passion," says Sir Edmund Gosse "for hoarding up little treasures of every kind—pebbles that friends picked up, leaves that had been plucked on a certain day, odd mementoes."

Andersen's first book of fairy tales appeared in 1835 and he soon became famous. Some of the tales in the first edition, such as "The Steadfast Tin Soldier" and "The Storks," he had told many times to children and now put into literary form for the first time. Others, such as "The Ugly Duckling" and "The Goloshes of Fortune," were obviously conceived and written later, for they plainly bear the marks of adolescent suffering and of mature experience.

In both cases Andersen spared no pains to make his stories clear to children. Sir Edmund Gosse says, "he used the lax, irregular, direct style of children and deliberately learned how to do so, cutting out all pedantic expressions." Deeply wounded by the treatment of the world of grown people, he who, in his innocence and love of simple things, remained childlike all his life, turned to children as the most appreciative audience, and devoted the whole of his skill to the task of amusing them.

World-wide Fame

Andersen's fame gradually became world-wide, and his habit of travelling and of announcing himself with charming ingenuousness as a great writer did much to bring him more readers. Whatever country he visited he sought out its representative literary men and claimed their friendship. He stayed at Gadshill with Charles Dickens and with Richard Wagner in Berlin. He was very proud of some verses that Mrs. Browning wrote about him after his visit to her in Italy.

He loved to hear little boys in the street call out, "There goes the great Hans Andersen," and could not bear to be unnoticed or to be criticized. Once, when seated in a coffee-house in company with a friend, he noticed a derogatory reference to himself in a vulgar paper, and was greatly agitated. "Is it possible," the friend inquired, "that you, with a European reputation, care what such a man says of you in such a place?"

"Yes," replied Andersen, with tears in his eyes, "I do a little."

Andersen's sensitiveness and even his vanity are understandable and pardonable when his early sufferings are taken into consideration. Of all beings he should have been shielded from the rougher shocks of existence; he was

THE DANISH KING OF STORY-TELLERS



Hans Christian Andersen, the fairy godfather of the children of the world, was a native of Denmark. As a tribute to his memory a statue, the work of Kondrup, has been erected in the city of Copenhagen.

exposed to many of the worst, and he bore his lot with childlike resignation. Although he mastered the arts of man, he never lost the innocence of a child. "How beautiful the world is," he exclaimed shortly before his death on the 4th August, 1875; "how happy I am."

So long as children are born the stories of Hans Andersen will be read, not only for the sheer delight afforded by their accounts of the

fantastic world in which all children partly live, but for the human truth and wisdom expressed in them.

When Andersen died he was busy studying the fairy stories and fables of past times. He had been telling stories all his life, but it was not until his later years that he came to realize the extent of the fabulous lore that had come down from one generation to another, and to which he had added his store.

Evolution of Story-telling

The earliest stories were fables. As soon as men had learned to express themselves and their needs clearly, they began to talk in metaphorical language about the world of natural objects around them. They compared one kind of thing with another, developing a new speech-form, and from this practice there gradually evolved the power of telling simple stories in which birds, beasts and fishes, plants and trees were made to talk and act like human beings.

At first there was no "moral" attached to these primitive fables. They were merely accounts of imaginary happenings. Nevertheless, such fanciful tales were the nucleus from which sprang the fable with a moral, as well as legends, allegories, myths, and all the poetry that has since been spoken and written.

The fable, however, continued to deal with animals and the inanimate world, and it is thus still distinguished from all other forms of story-telling.

The First Maker of Fables

Owing to the extreme antiquity of the fable as a form of story, it is exceedingly difficult to trace the authorship of many that have passed into all languages. Like the early poems, they were spoken at first, and probably many thousands of years passed before they were recorded. But just as Homer is regarded as the first poet, because it is certain that he collected the earliest songs and gave them permanent form, so Æsop is thought to have been the first maker of fables, because he made it his business to preserve the fables current in his time.

It does not follow, of course, that Æsop did not invent fables, any more than that Homer did not compose original poems. Both gave shape and permanence to the material that passed through their hands, and added to it at the same time. "There is abundant proof," we are told, "that fables passing under the name of Æsop were current and popular in Athens during the most brilliant period of its literary history, and not much more than a century after the death of the supposed author."

Socrates is said to have passed his time in prison by turning some of Æsop's fables,

which "he knew," into verse. There is also a reference to the "absurdity of Æsop" in the *Wasps*, a satirical comedy by Aristophanes.

Legend has played around the life and personality of Æsop. Some accounts describe him as hideously deformed, and statues of him have been unearthed in which he appears as a grotesque monster. The Greek sculptor Lysippus, on the other hand, executed a statue in Æsop's honour in which no deformity appears. There have been scholars who denied Æsop's existence altogether, but the evidence is now conclusive that some person of the name of Æsop, who not only collected fables but invented them, was born in Phrygia Major, somewhere about 620 B.C. and that he died about 564 B.C.

Slave in Iadmon's Service

This Æsop was of lowly birth. Herodotus mentions him as having been, along with the beautiful Rhodopis, a slave in the service of Iadmon, who subsequently gave him his liberty. A former master of Æsop was Xanthus. According to Plutarch, Æsop was present with Solon at the court of Croesus, King of Lydia. Before this time it is known that Æsop was in Athens during the reign of Pisistratus, whom he successfully dissuaded from a foolish policy by reciting to him the fable of "The Frogs Asking for a King."

Croesus evidently rated the character of Æsop very highly, for he entrusted him with a large sum of money to be distributed among the Delphians. It is not known why the money was to be paid, but there is evidence that Æsop, on his arrival at the capital, decided that the Delphians were unworthy to receive the money and withheld payment.

This naturally enraged the Delphians, who, not being able to disprove Æsop's accusations, trumped up a charge of sacrilege against the fable maker. He was thrown from a precipice and killed.

Humiliation of the Delphians

Afterwards an outbreak of pestilence in their capital convinced the Delphians that supernatural vengeance was being wreaked upon them for their unjust treatment of Æsop. In deep humiliation they came to Croesus and begged to be allowed to expiate their crime by paying a large sum to the nearest relatives of Æsop. As there was none, the money was claimed by Iadmon, the son of Æsop's former master.

The Æsopian fable gradually became a tradition. From 345-283 B.C. Demetrius of Phalerum made a collection of them in ten books. Babrius, a Roman and tutor to the son of Alexander Severus, turned the fables

THE GREEK MAKER OF FABLES IN THE HOUSE OF XANTHUS



Many ancient writers asserted that Æsop was hideously deformed, and statues of him have been discovered which portray him sometimes as a grotesque monster and sometimes without a trace of deformity. In this picture, from the painting by P. P. L. Glaize, Æsop is represented as a dwarf who was a slave in the service of Xanthus.

into rhyme in the early part of the third century A.D. Most subsequent editions have been based upon these.

A fresh lease of life was given to the fables in the fourteenth century by a monk named Maximus Planudes, who, in his preface to a new collection, insisted upon the ugliness and servile nature of Æsop.

Derivation of the Fairy Tale

The fairy tale, as we have seen, is derived more or less directly from the fable. In the stories collected and put into enduring literary form by Jacob Grimm and his brother William, we find animals and inanimate objects taking the parts of human beings, while the superstitions and beliefs of centuries are woven into the narrative, together with a strong leavening of moral purpose.

Jacob Grimm was born on the 4th January, 1785, at Hanau, in Hesse-Cassel, Germany. Like Andersen, he came of poor parents and, while still a child, lost his father. An aunt, who held the post of lady of the chamber to the landgravine of Hesse, helped to educate him and his brother William, born on the 24th February, 1786, and they both studied law at Marburg University.

Jacob Grimm's interest in mythology and folk-lore was first aroused by Savigny, the great antiquarian, and it was while in the latter's library in Paris that he decided to devote himself to the scientific study of languages.

On his return from Paris, Grimm obtained a post in the German War Office, but he soon grew dissatisfied with his duties. One of his chief grievances, it is said, was that he had to abandon his smart Parisian costume and wear a plain uniform and a pigtail.

In 1808 Grimm was appointed superintendent of the private library of Jérôme Bonaparte, King of Westphalia. His official duties were light and enabled him to devote much time to the pursuit of his private studies. The king evidently thought highly of him, for he sent him, in 1814, to carry out the delicate mission of demanding the return of certain rare books seized by Napoleon during his campaign.

Grimm's Eddaic Songs

Grimm's first contribution to the study of mythology and folk-lore was the compilation, in which he was helped by his brother, of a volume of Eddaic songs. It was published in 1815 and attracted little attention, although both the Grimms were already known as collectors of fairy tales, the first volume of these having appeared in 1812 and been followed by three new editions up to 1815.

In 1822 both the brothers resigned from their positions as deputy first and second librarians at the Cassel library on account of what they considered the unfair promotion of a subordinate. They worked together again at Göttingen, Jacob as professor and librarian, William as under-librarian. After five years

they were obliged to leave Hanover, owing to implication in a petition against the threatened abrogation of the constitution. Ultimately the brothers were invited by the King of Prussia to go to Berlin, where they both received professorships and were then admitted members of the Academy of Science.

THE YOUNGER OF THE GRIMM BROTHERS



The achievements of William Grimm might have been as great as those of his brother Jacob had not ill-health interfered with his working capacity. Described as "a jovial fellow," he had a wonderful gift for story-telling.

The two brothers were inseparable. We are told by a contemporary that "they both live in the same house, and in such harmony and community that one almost imagines the children were common property." They moved from one library to another, one brother invariably refusing to continue the engagement if the other were in the least dissatisfied with his treatment.

Throughout his long life Jacob Grimm toiled at the composition of learned works on grammar and language. But it is not for his "German Grammar" in four volumes, or for his important work on "The Origin of Language," that he is remembered so much as for the fairy tales that he recovered and rewrote in purified language.

Yet, if it had not been for Grimm's genius as a grammarian we should never have been able to enjoy the stories with which his name is associated. The stories themselves would, probably, have been forgotten, or the language in which they were originally told would have become debased.

Origin of His Stories

Grimm heard many of his fairy stories directly from the mouths of old people living in humble little German villages, and who remembered being told them by their grandparents. Many more he stumbled upon in the course of his laborious researches into the origins of words.

"Nearly all my labours," he said, "have been devoted either directly or indirectly to the investigation of our earlier language, laws, and poetry. These studies may have appeared to many, and may still appear, useless; to me they have always seemed a noble and earnest task."

If the only result of Grimm's devotion to a subject which many would think dull and uninspiring had been the preservation, in a form that will make them imperishable, of such beautiful stories as "Cinderella," "Little Snow-White" and "Hansel and Gretel," he would have

been regarded as a great man of letters. But his scientific investigations were also of great value and permanently influenced the German language as it is spoken to-day.

Jacob Grimm died in 1863, surviving his brother William by four years. The achievements of the latter might have been as great had not ill-health interfered with his working capacity.

The BUILDER of the OLD RUSSIAN EMPIRE

Peter the Great's Reforming Zeal, by Which He Dragged Russia from Her Mediæval Slumber and Ruthlessly Steered Her Along the Path of Progress

PETER ALEKSEIÉVITCH, Tsar of Russia, commonly known as Peter the Great, was born on the 30th May, 1672, the day on which the conquering armies of Louis XIV crossed the Rhine under Condé and Turenne. His father, the Tsar Alexis, had always been a weakly man, handicapped by wretched health, while his mother, Nathalia, was the Tsar's second wife, and had married him only a year before Peter's birth.

To this day the actual birthplace of Russia's greatest ruler remains obscure; it is only known that he must have been born in, or near to, Moscow, then the capital city of Russia. Unlike his step-brothers and sisters, Peter was a strong and lusty infant, who, from his earliest years, gave promise of that giant stature and those iron muscles, which were later on to be his particular pride.

To-day Russia remains the enigma of Europe, a country half western only, a land of snow and forests, whose peasants still remind us of the Middle Ages. But the Russia into which Peter was born, was far less enlightened and developed. Though she had a thousand years of history behind her, Russia then seemed but on the threshold of her real development. She was a land apart, altogether severed from her European neighbours, a land where feudal despotism still held unchallenged sway, where women lived secluded in a "terem." In fact, half-way through the seventeenth century, Russia was still in the dark ages, her civilization was quite five hundred years behind that of the countries of western Europe.

Peter was not destined to spend his youth in anything approaching an orderly or peaceful manner. His childhood days were passed in the fortress of the Kremlin. Here, at that time, the whole spirit of Russia was concentrated,

and all her oddities were summed up. A great, gloomy, haphazard block of buildings, the Kremlin was a palace, a church, a fortress, a monastery, and an arsenal. The Tsar of "Holy Russia," sitting on his throne there, seemed to his simple-minded peasant subjects (to whom he was a distant and benevolent tyrant, known as the "Little Father") not greatly different

from some saint's relic in the church hard by his throne-room—but a relic which was as yet very much animated.

In the huge Kremlin, Peter passed his childhood, in an atmosphere of muffled footfalls, whispered intrigues, chanting priests, and the screams of prisoners tortured in dungeons beneath his very nursery. Here he learned to read and to write from his first and only tutor, the deacon Nikita Zotoff, who also instructed him in the limited range of elementary subjects which then passed for "education" among the nobility of Russia. When Peter had reached the age of ten, his elder step-brother, Féodor, the Tsar Alexis' successor, died childless. At once all Moscow started to whisper, "Who will be his heir?"—for the

throne of Russia did not descend then by primogeniture; indeed, for the past hundred years it generally had been gained by creating a revolution.

Féodor left behind him a younger brother, Ivan, who was half blind and wholly feeble-minded. All the great officials and dignitaries of the kingdom resolved to pass him over and to make the ten-year-old Peter their Tsar. "For," said they, "we will not degenerate from officials into sick-nurses." They hoped, moreover, that Peter's youth would allow them some years of virtual interregnum, during which they could govern according to their own particular will. But poor half-witted Ivan, though he could do

A MIGHTY RUSSIAN GENIUS



Peter the Great, after the painting by Repin. The famous reforming Tsar lived on a grand scale, like one of the giants of old, and Russia is his monument.

nothing for himself, had a determined and dangerous partisan in his sister Sophia. No sooner had Peter been proclaimed Tsar, than Sophia started to stir up trouble vigorously, endeavouring to depose him so that she might set Ivan in his place.

Although she had lived secluded in the "terem" of the Kremlin all her life, and knew virtually nothing of the outside world, so determined, so able, and so well-served was Sophia, that ere Peter's rule had been a month proclaimed, she had fomented a revolt of the "streltsy" (native militia), had overthrown Peter's sole rule, and placed poor half-witted Ivan on the throne as co-regent.

The Death of Ivan

This uncomfortable and unprofitable joint-tsardom of the two step-brothers lasted for some few years, during which the two family branches waged a ceaseless war upon one another for first position in state affairs. The struggle ended, in fact, only with Ivan's death in 1696, when Peter became sole and absolute ruler once again. One of his first acts was to punish the Tsarevna Sophia. He incarcerated her for life in the Devichi monastery, where thwarted ambition and disillusionment helped to bring about her death in 1704.

Never has any great country possessed a more curious ruler than the young Tsar Peter. His family and adherents had all been far too busy counteracting Sophia's schemes to pay much attention to him, so that when at the age of twenty-four Peter really became master of Russia, he had not a few surprises in store for even his nearest relatives and friends. Though Nikita Zotoff had discontinued Peter's education, ere it was properly begun, Peter had managed to supply the deficiencies in his own thorough, but peculiar, manner.

Peter was gifted with enormous mental powers, and an immense restless curiosity. In physique he was a big man, muscular, sturdy, and rough-looking. His mind was very like his body. Hours of continuous effort tried it not at all—restless and incessant energy were the hall-mark of all his actions.

Sight-seeing by Torchlight

Arriving in Dresden one night, after a journey which had tired out all his suite, Peter insisted on being taken to the town museum. He reached it at one in the morning, and spent the rest of the night there, "feeding his curiosity by torchlight." Such conduct remained typical of him all his life. Peter was consumed by a great passion for action; all his waking hours were spent in doing deeds of violent exertion in one direction or another.

Such a restless, hungry nature, left to its own devices and youth, would naturally amass a

curious collection of knowledge. At the age of sixteen he found an astrolabe, and for a month or more he would do nothing but play with his new scientific toy. At Ismailof, a little village near Moscow, he came upon an old and battered English skiff, though how it came to be there, far from any waterway, has never been explained. Nevertheless, it turned Peter's mind to the sea, and to shipbuilding. He began to ask for books dealing with sailors' lore, and read them tirelessly, resolving that one day he would give Russia a navy of her own.

Vulgar, Noisy, and Insufferable

No one must imagine for an instant that there was anything particularly regal about this young Tsar. On the contrary, he was incredibly boorish, vulgar, noisy, and insufferable. He would talk and dine with anyone who interested him—private soldiers, ambassadors, coachmen, clowns, generals, or patriarchs of the Church. They were forced to sit down together at one rowdy table, while Peter presided, lading out spiced brandy from a barrel until he and all his guests were drunk.

One moment he would be cracking rough jokes with a Dutch sea captain, the next discussing new buildings with his architect, or wrangling with a Church dignitary over an abstruse theological problem. He would as soon dine in the lowest tavern as in his palace, so that though not "every inch a king," he came to know his people and their mentality through and through. His fellow princes may have laughed at him for a drunken, slovenly boor, yet he could sway Russia as no one else has done before or since, because he knew her heart so well. After all, he had such immense power that he could do exactly as he pleased.

Awakening Russia from Sleep

Peter's policy as Tsar was to Europeanize Russia, to awaken her from her feudal dream, to place her in touch with her sister powers, and to enable her to join the council-board of Europe as a great country, as a power with whom everybody would have to reckon. With Sophia out of the way, Peter immediately set to work, aided by François Lefort, an accomplished Swiss adventurer, Patrick Gordon, a Scotsman, and other foreigners. Lefort's house, a Genevan mansion transported to a Moscow suburb, almost became Peter's headquarters during the first years of his reign. Lefort was a genial and talented man, to whose spell Peter at once succumbed, greatly to Russia's advantage, for it was from Lefort that the Tsar acquired his preference for all things belonging to western Europe.

Peter determined that he must go abroad in order to study western ways, before he could implant them upon his countrymen. But first

THE CHILD LOUIS XV PAYS A VISIT TO PETER THE GREAT



Like most big men, Peter the Great had a tender spot in his heart for children, and, when the little Louis XV was brought to his apartments in Paris, Peter treated the boy with uncouth gentleness. The reforming Tsar's mind was as big as his body, and equally as restless. He was incessant energy incarnate, and liked others to emulate his example.

he had to fight a campaign against the Turks in the southernmost part of his vast realm. Russia then had no practical seaboard. She had no access to the Baltic, and the northern ocean was frozen over for seven or eight months in the year. Lefort, therefore, proposed seeking an outlet into the Black Sea, for outlet there must be, Peter declared, if ever Russia were to become prosperous. Accordingly, accompanied by Lefort, and in the highest spirits, Peter rode off southwards at the head of his troops. Peter had no experience at all of war. He met with almost insuperable difficulties, yet, by the 18th July, 1696, the city of Azof surrendered, and Peter had secured his Black Sea port.

First Continental Tour

Returned triumphant to Moscow, in 1697, Peter set out on his first continental tour. Travelling nominally as a member of Lefort's suite—Lefort had now become an ambassador—Peter first visited the Duke of Courland, and then passed on, by way of Brandenburg, across Germany to Holland. There he settled down at Saardam (Zaandam), a charming village, though he moved about a good deal in the neighbourhood of Amsterdam. The object of the Tsar's visit to this district was to learn

shipbuilding. Dressed like a local boatman in a red waistcoat, short jacket, and baggy trousers, Peter set to work, labouring in the dockyards by day, carousing with his fellow workmen by night. This was no make-believe at study; he worked as hard and as long as any Dutch shipwright. All through life Peter was ready to do any manual work. A grand duke once asked him if he cared for hunting. Peter displayed his enormous toil-hardened palms, and made reply, "I have no time for hunting."

His Visit to England

He continued in the Amsterdam district until January, 1698, when he crossed over to England. He was welcomed by William III, who had sent three battleships and a yacht to bring him to England, and appointed the Marquis of Carmarthen to act as his equerry during his visit. Carmarthen was almost as great an oddity as Peter himself, and the pair got on famously, becoming life-long friends. Peter remained in the country for three months, making a tour of every public establishment likely to afford him any information. He visited the Mint, Greenwich Observatory, the Tower, and the Royal Society. Two months of the three, however, were spent at Deptford Dockyard.

There Peter continued his studies in practical shipbuilding, living, as in Holland, the rough life of the workman, and enjoying himself far more than he did in elegant London society. A tavern which he frequented had its name altered, and until 1808 the sign of "The Tsar's Tavern" remained decorated with a supposed portrait of Peter.

The Tsar worked hard under Anthony Dean, then the doyen of English shipbuilders, and made considerable progress in his craft. Many

IN MEMORY OF A GALLANT DEED



Monument by Leopold Bernstamm. In the autumn of 1724, Peter went to inspect one of his public works, the Ladoga Canal. While returning from this tour he rescued the crew of a boat which had run aground.

stories are told of his life at Deptford, including that of the gardener who wheeled him through hedges and then tossed him out of a wheelbarrow. Though Peter was quite capable of enjoying such a simple amusement, this story seems to lack foundation. In April, Peter bade London and England farewell. Having presented William III with an immense uncut diamond screwed up in a dirty scrap of paper—a characteristic gift—he returned to Holland, taking with him a small following of artisans, engineers, and craftsmen.

On his way home he learnt that the erstwhile partisans of Ivan and Sophia had contrived a mutiny among the "streltsy." He hurried on to Moscow, but on arrival there he found that the mutiny had already been crushed by his own officers. His first tour ended, he began to put into practice the knowledge and experience he had gathered, and set himself seriously to the task of regenerating and revolutionizing the manners and mode of life of his millions of subjects scattered far and wide.

This new programme of reform, however, was abandoned temporarily through a serious war. Peter conceived the idea, probably during the year 1698, of attacking Sweden, and wresting from her a province on the shores of the Baltic—"a window open upon Europe." Augustus II, King of Poland, also had his eye on Sweden as a possible prey, and he and Peter arranged an alliance. Denmark, wishing to acquire Holstein, then a Swedish possession, also joined in. After an incredible amount of secret, but ill-concealed, diplomacy, all was ready for action in 1700.

Crushed by Charles XII

But the allies had reckoned without Charles XII of Sweden, a grim young man, who lived for war, and was then by far the greatest commander in Europe. War began, and Charles, falling upon Denmark, carried hostilities to the walls of Copenhagen within a month, forced a peace, and then hurried off to Livonia, where Peter was besieging Narva. His arrival at the head of an army, when they imagined him hundreds of miles away, completely demoralized the Russians, who fled almost without striking a blow. Thus Peter had been made the laughing-stock of Europe, his hopes of glory were shattered, and his work of civilizing Russia was rendered abortive. For a while he despaired, and then vowed vengeance. Thenceforward he determined to devote himself exclusively to military affairs till Charles should be crushed.

Accordingly, Peter set to work to reorganize his army and to improve his artillery. He even melted church bells for cannon, never worried by the outcry raised by priest and patriarch. Year by year he pursued his plans unremittingly, at first scoring nothing greater than minor successes in Livonia. In 1703, Peter, in person, won Russia's first naval victory, a small enough affair, but one which pleased him tre-

For biographies not included in the Groups see detailed Index

mendously. Nevertheless, by this fight, he captured the mouth of the river Neva, and three months afterwards, wooden houses began to rise upon the banks—the germ of Peter's own city, Petersburg (or St. Petersburg).

At last, in 1708, the tide of success turned definitely in Peter's favour. Charles made an attempt to reconquer the territory that Peter had won from him in the north, but the Russians were able to prolong the conflict until a winter campaign became inevitable, which was distinctly to their advantage. Charles was harassed by his enemies throughout the winter, and when the better weather came he had some 20,000 men in the field. Peter could not risk attacking him yet, but the new Russian armies drew in upon him in an ever decreasing circle. At last matters came to such a pass that Charles saw that unless he could manage to capture the town of Poltava, and hold it, his army must perish miserably from hunger.

Charles Wounded in the Foot

The discipline and morale of the Swedish army had deteriorated, and, though Poltava was but poorly fortified, the siege dragged on and on. Still Peter waited, for he realized that each day reduced the Swedes in number. By June all their ammunition had been expended, so that they were reduced to fighting only with cold steel. Hearing of this, Peter decided that the hour had come, and began to march towards Poltava. On his enemy's arrival, Charles was struck by a bullet while reconnoitring the ground. "It is only in the foot," he said, and not deigning to notice the wound further, he continued his work. Yet, on his return to camp he fainted, and had to take to his bed.

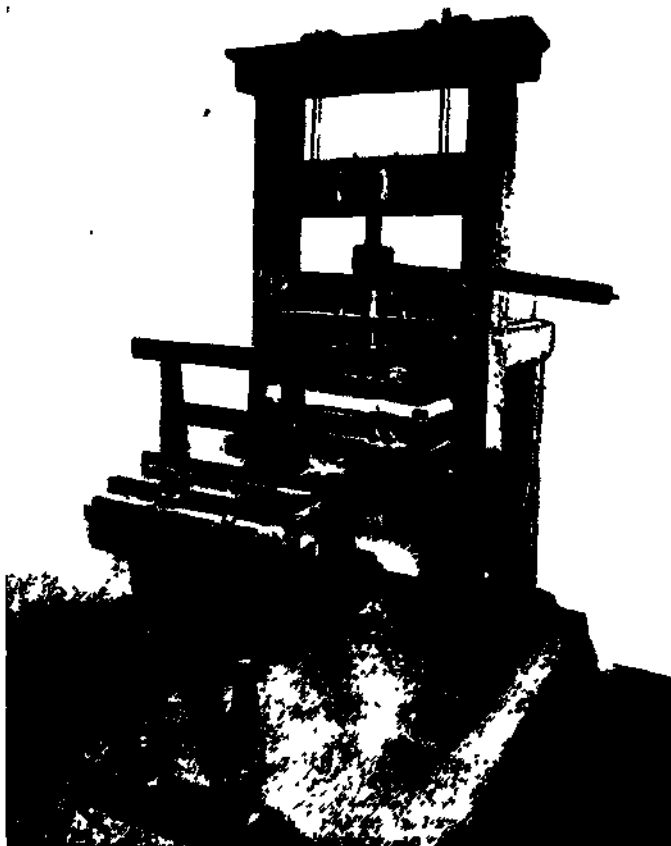
For ten days more Peter remained inactive, until finally Charles, though he was still suffering, resolved to take action. On the 26th June the battle began, Charles, with magnificent courage, being carried into the fray on a litter, and, when this was shattered by bullets, he had it replaced by crossed lances. Peter, on the other side, rushed here, there, and everywhere, encouraging, suggesting, fighting. But the battle was, from the first, a foregone conclusion.

Charles was "nothing but a living standard, useless, though sublime"; and two hours after the first shot the Russians had completely vanquished their enemies. Elated with their

success, they sat down to an improvised feast, making no attempt to pursue the retreating remnant of Charles's army. Nevertheless, Poltava is one of the decisive battles of history. At a blow, Peter had destroyed the Sweden of Gustavus Adolphus. Her star had fallen, and the star of Russia had risen in its stead.

Although Poltava decided the ultimate issue of Peter's great struggle with Sweden, hostilities by no means ceased. In fact, they dragged on intermittently, with some considerable intervals,

PETER THE GREAT'S FIRST PRINTING PRESS



From his childhood Peter had an insatiable thirst for knowledge, more especially in the technical and mechanical arts. He early made his own boats, and he quickly mastered the intricacies of the printing press.

until 1721, when, by the peace of Nystad, Sweden ceded Livonia, Esthonia, Ingria, Carelia, Viberg, and the adjacent islands to Russia. Peter thus obtained his "window open upon Europe," and, at the same time, raised his country to the status of a first-class European power. In crushing Charles, he had accomplished only part of his ambition—there yet remained the carrying out of domestic reforms.

Peter governed Russia not as an eastern potentate governs his subjects, but rather as a farmer manages his farm. He did not rule

absolutely for his own pleasure, but regarded his subjects *en masse* with the kindly consideration which a farmer extends to his stock. Having determined what was best for them, Peter would issue a series of ukases (proclamations), announcing with the greatest detail to his subjects their new duties.

In all this, however, he utterly disregarded the character of his people. Having told them what he wanted, torture and death seemed to him to meet the case of those who ventured to differ and to express their differences in

THE RULER OF RUSSIA AS AN EDITOR



Having learned how to use the printing press, Peter proceeded to acquire the difficult art of preparing material for the press, and his editorial duties were tackled with his usual restless energy.

actions. This policy he extended to all his domestic reforms, even in the smallest matters. The Russians did as their Tsar wished, or else suffered the penalty of their disobedience.

Peter's first care was to break down the Oriental traditions of home life among his subjects. The costumes of western Europe were introduced, and a ukase went forth ordering everyone to adopt them. He who clung to the long robe usually worn by Russian men, ran the risk of having it cut short above the knees by the Tsar's police. Beards, universally worn, were also condemned. At first, anyone entering or leaving the gates of a town wearing a beard

was fined, but this punishment was found to be inadequate, for the stubborn Russian preferred to pay rather than be shaved. So Peter directed that police should attend at each church door, and he who came to church bearded should have the offending growth forcibly and painfully removed. One poor peasant who thus suffered begged for his beard back, that it might eventually be placed in his coffin, so that he should appear decently before Saint Nicolas in heaven.

The women of Russia were next ordered to leave their "terems," and mix in society, as did their sisters of Germany and France. This ukase naturally met with strong opposition, so Peter supplemented it with another commanding the organization of evening parties in every town, at which the women folk of all prominent citizens were bound to appear. By this measure he had his wish, at all events in the towns, for, once the women became accustomed to their new freedom, they had no desire to return to their "terems."

An Old Marriage Custom

In the train of this liberation of Russia's women came other desirable results. The scandalous custom, by which bride and bridegroom never met until they joined hands at the altar, was discontinued, and Peter insisted that at least six weeks should elapse between betrothal and marriage, during which time the couple should be given opportunities for making one another's acquaintance.

All these appear minor reforms, yet they were the beginnings of an entirely new regime in Russia. By violently upsetting their customs and prejudices, Peter forced his subjects to emerge from the gloomy routine of dismal etiquette which had so long engulfed them. He broke down the barriers that separated Russians from the general culture of Europe, and

thus, by his organized parties and beard shavings, he Europeanized his subjects.

But these reforms were not all. Peter instituted and carried out great alterations in the machinery of Russian life and government. He curbed the power of the Church, though leaving it powerful enough to ruin some of his successors; he created an entirely new order of nobility based upon either civil or military service; and he altered the laws regulating trade, thus encouraging free intercourse and exchange throughout his vast dominions. Enraged by the continuous revolts of the "streltsy," he determined to destroy them,

PETER THE GREAT IN THE DOCKYARD AT DEPTFORD



Peter's ambition was to make Russia a power with whom every nation would have to reckon. An ice free seaboard and a fleet were essential. The first he gained along the Gulf of Finland. As for the ships, he himself learned how they should be built by working as an ordinary labourer in the dockyards of England and Holland.

For biographies not included in the Glosses see detailed Index

and replace them by an army built upon the European model. In fact, he exterminated the ancient and unsatisfactory militia, and (if history speaks true) himself used the executioner's axe in the process.

In place of the "streltsy" he gave Russia a regular army of about 58,000 infantry and 36,000 horse. The navy was, of course, his special interest; and on it he lavished the greatest care. Before the accession of Peter, Russia possessed no navy. During his reign, it is estimated that he built nearly 1,000 warships of different types, and left Russia the legacy of a powerful navy, which was, however, allowed to decay while at anchor.

In 1689 Peter had married Eudoxia Lopukhin, with whom he disagreed from the very beginning of their married life. In 1696 he divorced

A PALACE OF PETER THE GREAT



This magnificent building stands on the left bank of the Neva, at Leningrad, in the Summer Garden of Peter the Great, which is not unlike London's Hyde Park.

her, and she was forced to seek the seclusion of a nunnery. In 1711 Peter took as his second wife Martha Skavronska, who was baptized into the Greek Church under the name of Catherine. Ugly, almost masculine, Catherine was as remarkable a woman as her husband was a man. Risen from a sewing maid, she made Peter an admirable and most devoted wife; and, one moreover, who could understand and enjoy his strange pleasures and practical jokes. Accompanied by her, Peter embarked upon another European tour in 1716, visiting Amsterdam, Copenhagen, and Paris. This tour will ever remain memorable in European anecdote, for Peter, Catherine, and their suite created a tremendous and scandalous furore wherever they went. They behaved just as they pleased, and their general behaviour was of the coarsest.

Returned from this holiday, Peter again plunged, with enthusiasm, into hard work. New ideas and projects occupied his mind, and he was soon as busy as ever preparing new

ukases by which the life of his people might be more advantageously ordered. During 1721, however, Peter's health began to give way under his strenuous regime, hard drinking and unrelieved mental excitement. He suffered acutely from asthma, and during the winter bronchitis frequently kept him in bed, a state of things that greatly aggravated him.

During 1722 and 1723 he suffered agonies from kidney trouble, but he did not allow this to interfere with his manifold activities. Indifferent to the sufferings of others, he seemed equally able to put his own ailments out of mind. He told his doctors that they were all ignoramuses, and drove them from his presence with blows.

The Victim of a Fever

By September, 1724, the Tsar was a very sick man, and he then realized that his days were numbered. Yet this could not keep him, in October, from going to inspect works in progress on the canal at Ladoga. While there, in bitterly cold weather, he slept in a tent. On returning to St. Petersburg he fell into a high fever, and took to his bed, from which he never rose again. His last act before reaching St. Petersburg had been to rescue the crew of a boat, which had run aground in a river and was in great danger. At six o'clock on the morning of the 28th January, 1725, he died. Russia did not greatly mourn the passing of her greatest Tsar—rather she heaved a sigh of relief. Peter had tried to "knout" her into civilization, and on his death she prepared to lapse into her bad ways.

Yet all that Peter did could not be swept away. Eyes once opened cannot forget what they have seen, and Peter certainly opened Russia's eyes. Despite the anarchy and confusion that succeeded Peter's reign, his great works could not be entirely effaced, and its results emerged again many years later.

Monument of His Work

Russia remains as Peter's monument. He acquired for her six provinces, a coast and ports on two seas, an army, a navy, and a properly organized commercial system. Moreover, he ruled strongly from the Baltic to the Caspian; so, for all his vagaries he is entitled to be called "the Great."

Peter remains, perhaps, the most curious and eccentric of all the great rulers of history. Any account of his life must necessarily appear confused and disconnected, for, as Sophia Electress of Brandenburg and first Queen of Prussia, one of the shrewdest and cleverest women who ever made Peter's acquaintance, says, "He is an altogether extraordinary man—it is impossible to describe him, or even to imagine what he is."

[See *Lives*, by O. Browning (1898), E. Schuyler (1891), and K. Waliszewski (1898).]

The MAN Who MADE the FRENCH ARMY

Ferdinand Foch's Theory of War, and How He Put it into Practice, Carried His Plans to Victory, and Crushed the Might of Germany

"A COMPLETE Frenchman and every inch a soldier." Such is the impression that the greatest French soldier of the present century has made upon the world.

The vivacity, the piercing and logical common sense, above all the completeness and consistency of character, which have ever distinguished the great Frenchmen of history, are all written plain enough to be read by the most casual glance at that wrinkled face, with its steady, brilliant eyes—a face which somehow seems neither young nor old, but ageless.

Even when dressed in the old blue serge suits which he affects at home, no one could ever mistake Ferdinand Foch for anything but a soldier. He straddles about his garden, apparently ill at ease without a horse to fill the gap between his legs. Yet, though he walks on the legs of a groom, the stately head set firmly on the squarest shoulders and the aspect of grave authority in his bearing leave no doubt that he is a commander of men.

Ferdinand Foch made his first bow to the world at Tarbes in 1851, the year of the Great Exhibition in Hyde Park, London, which was to usher in an era of universal peace and good will. He was born on the 2nd October, exactly two months before the President Louis Napoleon became emperor. His father, a member of an old Pyrenean family, was secretary-general of the Prefecture, and lived at the village of Valentine, at the foot of the Pyrenees, where the Foch family, long established, built a substantial residence about 1870.

In this pleasant village Foch used to spend all his holidays. His parents lie buried in the local cemetery, and his sister is still in occupation of the family mansion.

A HERO OF THE WORLD WAR



In March, 1918, General Foch was made "Generalissimo of the French, British, American, and Belgian forces fighting upon the western front."

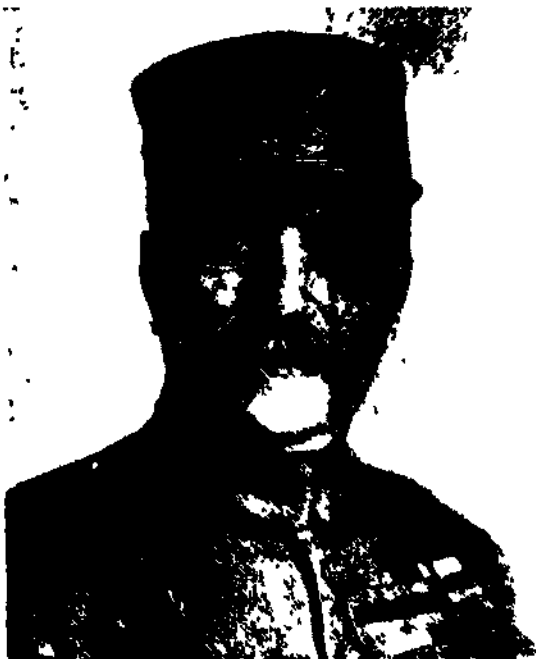
Foch began his education at the College of Tarbes, an old building long established as a school, over whose gate appears the remarkable inscription: "May this house stand until the ant has drunk the waves of the sea, and the tortoise made the circuit of the world." At school Foch showed no particular aptitude excepting for mathematics. As he progressed, his mathematical gifts became much more highly developed, and, when he was only thirteen years old, one of his masters remarked in a report: "Mathematical turn of mind; we'll see him at the École Polytechnique yet"—the École Polytechnique being an institution corresponding to the Royal Military Academy at Woolwich.

In 1867 Foch was appointed receiver of taxes at Saint-Étienne, capital of the department of the Loire, whither his parents and their family, which consisted of one girl, the eldest child, Ferdinand, and two younger boys, had removed. Shortly after this migration Ferdinand was sent to the famous College of Saint-Clément at Metz, a Jesuit establishment, to prepare for the École Polytechnique. He went to Metz in 1869, and before the year was out he gained

the "Grand Prix de Sagesse" (an award for general ability, wisdom, and conduct), awarded him by the unanimous vote of his fellow students.

But the Franco-Prussian war came as an unwelcome interruption to this serious young man's studies. Foch left Metz and joined the army for the period of hostilities, being posted to the depot of an infantry regiment at Saint-Étienne. He was discharged in January, 1871, when Bismarck concluded peace with the newly born Third French Republic, and returned to his interrupted studies at Metz, only to find the college partly occupied by Prussian soldiery. On his way to lectures, on his walks in the country, Foch was for ever meeting with the personnel of the army of occupation. It was a memory which burned into his very soul, and he resolved that *next time* France should be prepared, and that he would make her preparation his personal responsibility.

AN ILLUSTRIOUS SOLDIER OF FRANCE



"A complete Frenchman and every inch a soldier." Such is the impression that Foch, the greatest French soldier of our time, has made upon the world.

He sat for his final examinations at Nancy, where General Manteuffel had established the headquarters of the German army of occupation. With characteristic Prussian delicacy, Manteuffel would have a full musical "retreat" sounded through the streets. Forty-two years later, when commander of the 20th Army Corps, Foch ordered a great musical retreat to be executed by the bands and trumpeters of six regiments, and as he listened to the music on the 23rd August, 1913, the bitter memories of 1871 ceased partly to haunt his memory.

On the 1st November, 1871, young Foch entered the École-Polytechnique. Sadness filled the heart of the twenty-year-old student. France seemed crushed for ever by the might of Prussia. Part of the school had been destroyed by bursting shells during the bombardment of Paris and civil strife and the threat of anarchy overhung the city like a stormcloud. It seemed that the motto which the great Napoleon had given to the school in 1804, "Everything for Country, Knowledge, and Glory," could never again have any meaning. Yet Foch did not give way to despair, but for eighteen months applied himself diligently to his studies, and then passed out to the artillery school at Fontainebleau.

Best Horseman in the Garrison

At Fontainebleau Foch distinguished himself as a brilliant student, and obtained third place in the passing-out examination. He chose to return to his native district, and was gazetted to the 24th Artillery Regiment stationed at Tarbes. The country around Tarbes was famous throughout France for its breed of Arab thoroughbreds, and Lieutenant Foch soon acquired a passion for horses. He bought one or two suitable mounts, and became by far the best horseman in the garrison. After two years at Tarbes his ardour led him to the Cavalry School at Saumur, whence he passed out fourth—a great feat considering that he had the crack riders of the whole French army competing against him.

After leaving Saumur he filled posts at several military stations until 1883, in which year he began his true career by entering the Staff College in Paris. Two years' hard and incessant work ensued, and Foch repeated his former successes by passing out fourth. For several years he held various probationary staff appointments, and in October, 1893, he returned once more to the Staff College, as instructor in military history, strategy, and applied tactics. In the following year he was promoted to the rank of lieutenant-colonel and chief instructor.

Moulding the Future French Generals

In this position Foch lectured to the brains of the French army. He wielded enormous powers, for by his teaching he could more or less mould the future generals of France according to his own ideas. The eighty officers who formed each annual class never forgot the lectures which their instructor delivered. He awakened in them a desire to become masters of their profession. He created a new tradition of intellect, of efficiency, of ceaseless effort and vigilance, throughout the staff of the French army.

These lectures formed the subject of Foch's

His Theory of Warfare

three great military works, "On the Conduct of War," "Battle Manœuvres," and "The Principles of Warfare." "'Shepherds' fires, lit on a stormy coast to guide the uncertain seaman"—these lines," remarks the marshal in his original preface, "might well be applied to the following pages. They were written for young officers." One "young officer" in particular carried them out triumphantly—himself.

In his theory of warfare he developed and amplified the great Napoleonic tradition "Preparation, mass, impulsion. You must seek the shock," he wrote nearly thirty years ago.

"Of all faults, only one is degrading, namely, inaction." Since he assumed command of all the allied forces in the World War of 1914-18, Foch has convincingly lived up to his own teaching. By the detailed application of his own theories he beat the Germans, by a faith in his own methods he won the greatest war of all time.

Career Interrupted

In 1900, political and religious differences, those scourges of the French army, interrupted Foch's career for a little time. The great soldier has ever been a devout Catholic, and this was sufficient to make his position unbearable under General Bonnal, a fanatical anticleric, who became commandant of the Staff College in 1900. Obstructed and annoyed beyond endurance by this officer's regulations, Foch resigned, and joined the 29th Artillery Regiment at Laon.

In 1903, however, he was given another staff appointment at Orleans, and in 1907, promoted to brigadier general, he was posted to the general army staff in Paris.

That old tiger, Georges Clemenceau, already Foch's firm friend, had then just become President of the Council. The authorities were casting around for someone to succeed Bonnal at the Staff College. Clemenceau proposed Foch, and consent being unanimous, he sent for Foch and said, "I offer you the command of the Staff College." "Thank you," replied the brigadier, "but doubtless you are unaware that one of my brothers is a Jesuit." "I know

MARSHAL FOCH

that, but I don't care a d—n. You will make good officers, that is all that matters." So Foch returned to his task of creating the brains of his country's army.

Ever since his first appointment to the Staff College, the German Intelligence Department in Berlin had kept an eye on Foch. They recognized him as the astutest military brain in

MARSHAL FOCH SALUTES KING GEORGE V



Of all the dramatic moments of the march through London of the Allied fighting forces on Peace Day, the 10th July, 1919, none was more moving than when Marshal Foch rode past King George V and gave him the salute of a marshal of France.

France, and a little dossier was kept of his doings. Although his reappointment to the Staff College came rather as a blow to the Prussians, who thought that his Jesuit brother had ruined Foch's career, the dossier concludes, "He will never be entrusted with a high command owing to his clerical associations."

Back at the Staff College, and in command, Foch set to work reorganizing the course there. Not too proud to learn from that marvel of efficiency, the German army, he scrapped the crowded two years' curriculum then existing and substituted a three years' programme, based

on that of the Kriegsakademie in Berlin. After five years of most useful work at the College, Foch was made a divisional general by Alexandre Millerand. The following year (1908) he was promoted 'corps commander, and in August, 1913, as already recorded, he took command of the 20th Army Corps at Nancy.

Ignorant of Coming Conflict

When he assumed this command, Foch possessed a very clear idea of the war clouds that had been gathering over Europe since 1912. Spurred on by this realization of imminent danger, he did everything in his power to improve the somewhat inadequate fortifications of Nancy. During July, 1914, he took part in the ordinary normal programme of peace-time manoeuvres, in ignorance of the plans of aggression then being formulated in Berlin and Vienna.

The manoeuvres concluded, the general went to Morlaix, in Brittany, to spend a fortnight's leave with his family on his estate there.

The fact that he was granted leave at such a time forms, perhaps, one of the best answers to the view, propounded by Germany, that France desired the war, and had sedulously prepared for it. Had this been so, the commander of the corps stationed at Nancy, a corps which a month later bore the first shock of the German onslaught, would most certainly not have received a fortnight's leave.

During the first few days of the war, Foch's whole teaching at the Staff College crystallized in his brain. The hour had arrived when he would at last have the opportunity for which every military theorist in his heart longs—the opportunity to test his theories in the great game of war. Foch, moreover, had an added cause for apprehension, since the whole staff of the French army, excepting the chief senior officers, had been instructed according to his ideas.

Check to Enemy's Progress

During August, 1914, while the right wing of the German army was pushing on through Belgium in an effort to reach Paris, the left wing, starting from Metz and Strasbourg, was to attack the French right flank, turn it if possible, and then break through into France between Nancy and Epinal. Had the Germans broken through here, they would have been able to take in the rear the chief strength of the French army, which, under Joffre, was withdrawing from Belgium to the Marne. It was, therefore, absolutely imperative that the French army in Lorraine should set up an impenetrable barrier. Largely owing to General Foch this army accomplished its object.

The 20th Corps, under his command, delivered a brilliant and most successful counter-



attack upon superior German forces, an attack which ultimately stopped the whole forward movement of the German left wing, and so clogged the plans of the high command. So serious did the Germans consider this holding up of their left wing that a telegram dispatched on the 27th August, which was intercepted, read: "On no account whatever let our armies in the west (those marching through Belgium), know of the check to our armies in the east" (those in Lorraine). Ultimately, the responsibility for thus checking the German advance lay with Ferdinand Foch, whose theory seemed to justify itself brilliantly in practice. No sooner had he won this first success than he relinquished his command in Lorraine, and went to command the 9th Army, which held the now critical centre of the French front.

At His New Headquarters

Arrived at his new headquarters at Châlons, Foch found everything in chaos and confusion. Liaison officers had no idea as to the whereabouts of different units. "You don't know?" the new commander said to them, with an air of half ironic shocked surprise. "All right, then go and find out!" A week or so of this sort of treatment induced the staff to locate, reorganize, and knit together the whole army, and what, on Foch's arrival, had been a somewhat motley though sturdy force was quickly reduced to a model of correlated interdependence. The new general proved implacable in his search for information. All things had to be precise and particular in order to please him. Only one thing really annoyed him, a "there-or-thereabouts" point of view—this made him furious.

During the fatal days of September, 1914, while the battle of the Marne raged and the fate of Paris seemed to hang on a thread, Foch was fighting his army all the while. With great audacity he moved divisions hither and thither under the enemy's very nose—but without his knowledge. He was here, there, everywhere, always thirsty for information, cool, calm, and collected, just as though he was on manoeuvres. Finally, the issue moved in favour of the French and British, and the grey masses of German infantry were rolled back from the Marne to the Aisne.

Race for Coastal Towns

The Germans next threatened to break the French front on their own extreme right wing, and a race towards the coast began, with the Channel ports of Nieuport and Calais as the objective. In spite of the Germans' superior communications the French won, and the coast alone prevented any further expansion of front. On the 4th October, late in the afternoon, Foch received a telegram appointing

THE MARSHAL'S BEAUTIFUL HOME IN BRITTANY



The Manor House of Traoufunteunou, Foch's home in Finistère. The estate consists of the manor house, with extensive grounds, and five farms, all of which have belonged to his family for more than a century. Finistère was part of the old province of Brittany, and the strange name, Traoufunteunou, is the Breton form of "Bas des Fontaines."

him assistant to the general commanding-in-chief, Marshal Joffre, and ordering him immediately to take command of the four armies which were opposing the Germans in the north.

By four o'clock next morning Foch was waking up the sleeping staff at Breteuil, General Castelnau's headquarters, demanding hot coffee and, as usual, exact information. Two hours later Foch and Castelnau were driving to Amiens, bringing with them another general, whom they had fetched from his bed.

Early Morning Visit to General French

On the 30th October Foch heard that the British had been violently attacked south of Ypres, and had been forced to yield considerable ground. The line had been pierced and the French flank was threatened. Foch rushed from his headquarters, leaped into his car, and dashed off to Saint Omer, where Sir John French then was. He arrived at one in the morning. When French had been fetched, he said: "Is it true that your line has been broken?" "Yes." "Have you any reserves?" "None." "Well, you can have

mine. We must fill the gap at once. If the Germans get through at a single point we are lost. . . . I have eight battalions. Take them, and on you go!" By two o'clock the orders were given. Next morning the gap was filled.

Granted a Signal Privilege

The Germans did not break through, and the war settled down to a series of hard-fought battles, resulting in little or no gain for either side. Until the great final German offensive in March, 1918, the state of affairs, taking a broad view of the western front, remained in a position of stalemate. Until September, 1916, Foch remained with his command in the north, but on the 30th of that month he was granted the privilege of retaining his rank without age limit (a signal honour in the French army), and temporarily removed from an active appointment. He proceeded to Senlis, where he organized a committee for the discussion of inter-allied military questions.

During May, 1917, he was created chief of the general staff, and took up his quarters at the Invalides in Paris. He studied all the

allied fronts, and formed the liaison between the commander-in-chief and the government. Later in the year the need for an allied war council was, at long last, made plain, and Foch became the French representative. A painter who sketched one of the sittings of this council from behind glass doors has written :

I could not hear . . . but I saw. General Foch held his listeners under a sort of fascination. One felt that in his statement there was not a break, not a hesitation. Everything seemed to be clear, exact, irresistible.

After reading these words, it seems scarcely remarkable that, when the desperate German effort of March, 1918, made a unified command essential, this command was entrusted to General Ferdinand Foch.

Command of Allied Armies

To effect this unification in the allied command, Britain's Prime Minister, David Lloyd George, at once exerted all his influence to bring about Foch's appointment to this supremely important position. The brilliantly versatile Welsh politician and the master mind of the French army were attracted to one another at their first meeting during the earlier years of the war. Both possessed an equal *bonhomie* and charm of manner, and their acquaintance had soon ripened into friendship. It is, perhaps, not too much to say that the strong support which Lloyd George gave Foch ultimately effected his appointment as generalissimo.

Some time afterwards, when hostilities had ceased, Foch sent his photograph to Lloyd George inscribed with the following words : "To M. Lloyd George—to the great Prime Minister—to the man who swept the clouds from a very stormy sky." Shortly after this the two met, and the statesman was congratulating the soldier on his marvellous exploits. Shrugging his shoulders, Foch answered : "Well, I am your invention." "If you are," retorted Lloyd George, "you are one of the greatest inventions of the war."

Raised to Rank of Marshal

On the 30th March a communiqué announced the appointment. The happenings of the days that followed are too well known to need mention here. The German attack failed. By August the Allies were advancing to a victory which might be delayed, but which had become gloriously certain. During the intervening months the crisis of the war had arisen, and passed. Once more the Foch "theory of war" had justified itself in practice. On the 6th August General Foch was elevated to the rank of Marshal of France, to join that fellowship of great soldiers among whose number are Napoleon, Ney, Soult, Luxembourg, Saxe, and Turenne.

On the 8th November Foch received a German delegation in the converted restaurant car which served him for an office, on a railway siding in the forest between Rethondes and Compiègne. In a subsequent interview he gave an account of the proceedings exactly as they had occurred. As he saw the Germans appear, headed by Erzberger, he said to himself :

Here is the German Empire. Well, since it comes to me, I am going to treat it as it deserves. It is beaten. I shall be firm, cold, but without rancour or brutality. . . . I turned towards Erzberger and said to him, "What do you want with me?" "We are come to receive the conditions of the armistice." I replied to him, "I have no communication to make to you. If you have a demand to make, make it." He made fresh explanations. I said to him : "Do you want an armistice?" He replied, "We want it." I answered : "I am going to tell you on what conditions the Allied Governments, through me, will consent to afford you an armistice." . . . In the next carriage, General Weygand read out the conditions. . . . As for myself, I sent an order to all the Allied armies, a last appeal to the valour and energy of all. All the commanders-in-chief sent an enthusiastic reply : "Count on us ; we shall not stop."

Signing of the Armistice

The Germans had seventy-two hours in which to sign. They talked. They were reminded that the hours were running out. "I am going on to the Rhine," said Foch. "If you oppose me, so much the worse for you, but whether you sign an armistice or not, I do not stop until I reach the Rhine." They signed. At seven o'clock on the evening of that memorable day, the 11th November, 1918, Foch entered Clemenceau's office in Paris. "My work is finished," he said. "Yours is beginning."

Thus Foch carried his plans to victory, and crushed the might of Germany with the troops under his command. Once the armistice was signed, his responsibility ended. "There is my armistice," he is reported to have said to Clemenceau, then Prime Minister of France ; "you can now make whatever peace you like to impose." Since then Foch has attended many a conference in the capacity of military adviser, notably that in London which led to the occupation of the Ruhr.

Anxiety Concerning Safety of France

After the Treaty of Versailles was signed Foch's chief anxiety was, naturally, that this peace, which his generalship had so largely made possible, might become endangered by political makeshift. He feared lest the victory his soldiers had won should be frittered away by compromise after compromise. His one desire has been the security of his own land. In her greatest peril France's safety was entrusted to his keeping, so that it is not strange that to-day he is still urging that nothing should be left undone to prevent another catastrophe from breaking in upon her peace.

TAKING A WELL-EARNED HOLIDAY AT HIS COUNTRY SEAT



Far removed from the battle-front, Foch enjoyed to the full the first leave he was able to take during the World War, and his little grandchildren gave him a hearty welcome. Dressed in comfortable country clothes, the great soldier lived the simple life, rising early and inspecting every corner of his ancestral estate.

Foch is a soldier; he has not too much faith in projected Utopias of good will and eternal friendship. He would see France strong and prepared against all eventualities. With this end in view he has spared no pains to instil the lessons learned from the war into all branches of the French army. He is always ready to adopt any improvement in weapons, in organization, in tactics, and it is due to him that France has at her command by far the largest and most perfectly prepared and equipped armed force in the world.

Life at His Morlaix Estate

In recent years Foch has chiefly enjoyed the respite he has so well earned at his country estate at Morlaix. There he indulges in his favourite sports of shooting and riding, smokes mostly cigars, but sometimes a pipe (a habit he acquired during the World War), and lives the ordinary life of a French country gentleman. He has visited England several times on occasions of State, always to meet with London's warmest welcome, for this keen-eyed old eagle of a soldier, with his big walking-stick, appealed

vividly to the British imagination. He also made a tour through America, which almost amounted to a triumphal progress.

A Deeply Religious Man

Above all things Foch is a most deeply religious man, and a devout Catholic. Just before the last great offensive, in 1918, the marshal called together the commanders of his united armies in conference. Their deliberations ended, he rose, and said: "The good God has delivered us twice, and I feel He is going to help us a third time." Half an hour later an important telegram arrived. Foch was nowhere to be found, but at last a messenger discovered him on his knees. When the news of final and conclusive advances arrived from all the fronts, his first words were: "Not unto us, not unto us, but unto Thy name we give the glory."

Yet, notwithstanding all his brilliance in his chosen profession, notwithstanding his strong force of character and his innate simplicity of mind, Foch retains to the full all the prejudices and traditional ideas of the ordinary

Frenchman. The British are commonly held to be the most insular race under the sun, but in actual fact their insularity is as nothing to that of the French. Having been, as it were, the pattern nation of Europe for centuries, the French naturally assume that their institutions, their language, their customs are the standard for those of all other peoples.

Foch heartily subscribes to this charming impression. French ways are the only ways for him, French dishes the only edible ones, French

THREE NOTABLE FIGURES OF THE WORLD WAR



The famous soldier walking with Lloyd George and Aristide Briand, the French war premier, who at a critical stage of the conflict rallied his nation with the watchword, "United action on a united front."

hours the only hours, French conversation the only medium of communication among sensible educated men. Although he so deeply admired the race qualities of the British soldier, a trace of the idea that the British were the traditional foes of his country lingered on in his mind until after the war ended. He once even confessed to wondering whether Britain would not demand Calais back as the price of her part in the war.

For himself Foch desired no honours. He did his duty; that was enough. His only son fell in the war, but he insisted that the fact should never be mentioned. For the time being he was a general, not a father. Any kind of demonstration perturbs his equilibrium completely. Once, on the anniversary of Armistice Day, a crowd gathered under the windows of his Paris flat and shouted for a speech. Foch appeared on the balcony and exclaimed: "Pardon me, I am now going to lunch." All he desires is that he himself and others should do their duty.

"Excuse me, am I near the Wounded Soldiers' Institute?" asked a blind veteran of him one day in the Paris streets. "Let me take you," replied the marshal, who happened to be in mufti. At the door he asked the commissionaire to take the man to the section for the blind. "Take him yourself," growled the surly commissionaire. The marshal did so, but on his way out he stopped: "Couldn't you be a little more obliging to the blind?" he asked the commissionaire gently. "It seems to me it is your duty to help them. I can find time, and I am Foch."

Concern for His Pipe

Throughout all the disasters and hopes, the despairs and anxieties of the war, Foch never worried saving over one thing—his pipe. In 1916 someone introduced him to pipe-smoking, in place of the French cigars to which he was so firmly attached. While Sir William Orpen was busy painting his portrait telegrams kept pouring in upon the commander-in-chief. Whether the news they brought was good, bad, or indifferent, Foch read them all calmly and made no comment beyond hissing softly through his teeth. One thing, nevertheless, worried him terribly—"ma pipe."

It is given to few theorists to embody their theories in practice on a vast scale, and to do so successfully. Marshal Foch has that satisfaction.

He has also the satisfaction of knowing that he can do what he wants to do supremely well. He is happiest when thinking of himself as a soldier who has done his duty in that army which has a war-record, stretching back through centuries, more brilliant, more tremendous than that of any other in the world—the army of France.

[See "Marshal Foch, His Life, His Work, His Faith," by René Péraux, translated by E. Allen (1918).]

TITIAN, SUPREME MASTER of COLOUR

How He Left His Native Mountains for the Queen City of the Adriatic, Whose Splendour He Caught and Recorded on His Glowing Canvases

A MAN of genius, if he is to come to full maturity, must be happy in the place in which he lives, and also in the times in which he lives. It is better, perhaps, to live in Europe than Cathay, but even in Europe there are regions which, though they may produce Miltons, would, by their loneliness and desolation, render them mute and inglorious.

No less true is it that there are unheroic epochs which offer no inspiration to genius, and which, by their lack of ardour, paralyse the imagination and chill the heart. In the history of civilization there are gloomy centuries of unproductiveness, dark patches where the scintillations of genius hardly emit a single gleam. On the other hand, there are some periods so rich in energy, so radiant with life, that every gift with which man is endowed blossoms into exultant activity.

In both respects, in the place where he lived and in the times in which he lived, Tiziano Vecellio, or Vecelli, was happy. Although not actually born in Venice he spent his life there, and Venice is the most beautiful city in Europe. There is no place elsewhere to compare with her in queenliness and splendour; no other city possesses buildings more entrancing than her marble palaces, or is set

amidst colouring which can equal that "melodrama of flame and gold and rose and azure and orange which the skies and lagoons of Venice yield almost daily to the eye." If one is born an artist, then what fortune could be greater than to have this melodrama of colour constantly before the eye?

It was Titian's good fortune also to be alive when Venice was at her artistic zenith. He was born about 1477—the exact date is unknown. At that time the city set in the midst of the sea, though beset by enemies, and rapidly losing her commercial supremacy, was enabled to keep her independence by the impregnability of her lagoons and the jealousies of the great powers. Venice still had vast possessions. Thus Titian, in his long lifetime of nearly a hundred years, lived through the noonday of her splendour, when her palaces were filled with merchant princes and foreign ambassadors, when her state ceremonial outvied in magnificence all the rest of Europe.

A daily witness of all this pageantry, this feast of movement and of colour, Titian may well be regarded as one of the most fortunate of men. In his rich and glowing canvases we perceive how much he is the child of the city of his adoption, as also in the rich costumes and proud bearing of the



Statue of Titian at his birthplace, Pieve di Cadore. Titian spent most of his life in Venice, and he is the typical representative of the Venetian school.

For biographies not included in the Groups see detailed Index

The artist was now at the height of his powers, and the full scope of his genius was displayed when, in 1518, he produced for the high altar of the Church of the Frari his world-renowned masterpiece, "The Assumption of the Madonna." This great work, which takes its place amongst the finest paintings in the world, is now in the Academy in Venice. It represents the Madonna soaring upwards towards heaven, with hands uplifted, surrounded by a crowd of cherub angels; above is the Heavenly Father awaiting her, while beneath on the earth is a crowd of saints who gaze upon her in rapture and stretch out their arms in supplication.

The picture caused a profound sensation when first exhibited, and it is one of the most

THE HOUSE WHERE TITIAN WAS BORN



As the traveller leaves the village of Grotto Castello and draws near the castle of Cadore, a cottage is seen on the right, which an inscription proclaims to be Titian's birthplace.

glorious works of the Venetian school. The grouping of the figures, and the arrangement of lines which draw the eye upwards to its culminating point, show a consummate mastery of technique, while the depth and richness of its colour are unsurpassed in art.

Although Titian lived so public a life, what Emerson says of geniuses is true of him—that they have the shortest biographies. Although he lived to close upon his hundredth year, it is difficult to fix with accuracy any of the important facts of his life. Somewhere about 1525, however, he married a lady whose Christian name, Cecilia, only is known—we know nothing either of her character or appearance. He had three children at least. The first, Pomponio, was no credit to his illustrious father. When six years of age he was destined for an ecclesiastical career,

but he proved of a worthless disposition in later life, and it is on record that Titian grew so indignant with his wastefulness that he obtained the transfer to a nephew of a benefice which he had procured for his son. The fortune which Titian left, this profligate member of the priesthood soon squandered and frittered away.

The second child was a daughter, Lavinia, evidently dear to her father's heart, since he never wearied of painting her portrait. The third child, Orazio, followed his father's profession and aided him in many of his works, without attaining for himself any conspicuous success. He is believed to have passed away about the same time as his father.

Titian's married life was of short duration, as he had the sorrow of losing his wife in 1530, she having died in child-birth. He never married again, but shortly after his wife's death, removing to a beautiful house in one of the suburbs of Venice, he brought his sister from Cadore and placed her over his household. Here he entertained in a lavish manner, and, being the most conspicuous figure of his day in Venice, he was visited by all the distinguished persons who came to the city. It is related that, on one occasion, Henry III of France, when passing through Venice, called on Titian with a large retinue of nobles, and the painter, to mark his appreciation of the honour, offered him as a free gift all the paintings of which he had taken particular notice.

Honours Showered on Him

Honours now came to him from every side. Kings and emperors and popes were his friends and patrons. In 1532 he painted a portrait of the Emperor Charles V, and received from that monarch the signal honour of being created a count palatine and Knight of the Golden Spur, his children also being made nobles of the empire. He was received by the King of Spain with such marked honour that one of the nobles ventured to expostulate with the monarch, who defended himself by saying that "there were many dukes, but only one Titian."

So numerous were the commissions now pouring in upon him that complaints were being constantly made as to his failure to fulfil his promises. His own Government were the most embittered in their dissatisfaction at his repeated delays and failures in executing the work which was part of his official duties. They even went the length of appointing another artist in his place and of demanding the refunding of the money which he had received for the unaccomplished work.

THE COLOURIST WHO STANDS SUPREME



A part of Titian's *Assumption of the Madonna* in the Venetian Academy. This picture is one of the best known masterpieces of this world-renowned artist who is the typical representative of the Venetian School of painting.

For biographies not included in the Groups see detailed Index

BEARING ALOFT FAIR FRUITS IN FAIRER HANDS



In this portrait of the painter's daughter, in the Kaiser Friedrich Museum, Berlin, Titian displays those qualities that have caused him to be regarded as, in certain respects, the supreme portrait-painter of all time

For biographies not included in the Groups see detailed Index

SAINT CATHERINE EMBRACES THE HOLY CHILD



A superb example of Titian's devotional painting is seen in this group in the Prado, Madrid. The tender gaze of the Madonna and the Holy Child's look of trustful love are portrayed by a master hand.



This beautiful group, "The Madonna and Child with St. John the Baptist and St. Catherine Embracing the Divine Infant," is in the National Gallery, London. In the distance is the angel appearing to the shepherds.

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A MONARCH WHO WAS EVERY INCH AN EMPEROR



Titian's masterly portrait of the Emperor Charles V, showing unmistakably the protruding Hapsburg chin. As a portrait-painter Titian was in great request, and emperors, popes, kings, and dukes live for us by his brush.

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The painter, however, who was substituted for him, died within the year, and Titian, having placated his accusers by painting on the walls of the palace the battle of Cadore, was asked to return to his former post. This painting, which from the preliminary studies still in existence seems to have been a work of great vigour and dramatic force, was burned with several other important works in an outbreak of fire in 1577.

Notwithstanding the honours lavished upon him, and his amazing industry, it seems as if his lordly patrons were not over scrupulous in paying their debts, and his correspondence is full of complaints about paintings for which he had received no payment, and of pensions in arrears. No doubt much was required to maintain his establishment in the magnificence he loved, but it is clear also that he jealously guarded the sources of his income, and was by no means ashamed of dunning the defaulter, however august that person may have been.

The Death of Lavinia

Few men lived a life so placid and fortunate as Titian, but one other sorrow fell to his lot in the death of his much-loved daughter Lavinia, who, having married in 1534, died in 1560.

In the lives of most artists there are definite periods in which their art changes in its centre of interest and frequently in its method. Titian's life, however, was so uniform and his workmanship so consistent in its breadth and design, that any such division can only be made with qualifications. Generally speaking, it may be said that from 1500 to 1510 he was chiefly interested in the paintings of Madonnas and Holy Families. In the ten years following, up to 1520, religious subjects of a wider and more dramatic character occupied his mind. The years 1520-30 are those when his most famous portraits appeared, and when classical subjects seem to have found a special appeal. Historical compositions dominated the years from 1530-60, and then in extreme old age he returned to subjects of a more definitely religious character.

Amazing Productive Faculty

Even when his long life is taken into account, his productive faculty is amazing, and no less amazing is the extent of his invention. There are in existence more than a thousand pictures which are claimed as coming from his hand. No doubt many of these must be regarded as spurious, but, even with this admission, the number of genuine works reveals the arduous life he lived. Of these there are six in the National Gallery, London, eighteen in the Louvre, Paris, sixteen in the Pitti Palace, Florence, eighteen in the Uffizi Gallery, Florence,

seven in the Naples Museum, eight in the Academy of Venice, and forty-one in the Madrid Museum.

We are happy in possessing in our National Gallery a picture which all critics agree in placing among the finest of his works. This is the picture known as "Bacchus and Ariadne." This painting, which many competent authorities regard as the gem of the collection, was purchased in 1826, along with three other pictures, for the ridiculous sum of £9,000. "No single picture," says the official catalogue, "not even Rubens' 'Château de Steen,' has

A GRAVE AND REVEREND SIGNIOR



A man of imposing presence, Titian moved amid the lordly men and gracious women of Venice, and the stateliness and grandeur of Venice are reflected in his canvases.

had so great an effect upon British art. The intense glow of colour, the oppositions of blue and scarlet, of green and purple and russet brown, have delighted generations of painters, while the work combines breadth and vigour with the most exquisite finish to a degree which even Titian himself never surpassed. The spirit, the vitality, and the movement of the picture make average works by the master seem tame in comparison."

Titian worked up to the very end of his long life, and even in extreme old age showed little of the feebleness one would naturally expect. Most artists, even those accounted great, are

For biographies not included in the Groups see detailed Index

eminent in one particular department, but Titian was an artist of almost universal gifts. Along with Giorgione he may be regarded as the first to reveal the glories of pure landscape painting, and the lovely backgrounds which he introduces, mostly reminiscent of his loved Cadore, give an added wealth to the beauty of his compositions.

In portraiture he was one of the greatest, if not the very greatest of all. No more lovely women were ever painted than his Flora, his Bella, and his Violante. "If we analyse,"

A FINE EXAMPLE OF TITIAN'S RELIGIOUS WORK



"The Tribute Money," after the original in the Dresden Gallery, painted, it is said, to show that a picture may be highly finished without that extreme attention to detail that marks most of Albrecht Dürer's work.

says Stearns, "the fame of Michelangelo, of Raphael, and of Titian, I think we shall find that the celebrity of the first is chiefly due to his statues, of the second to his Madonnas, and of Titian to his paintings of beautiful women."

But Titian was great also in his rendering of religious subjects. Of the large number which belong to this class, perhaps his greatest is "The Tribute Money," now in Dresden. Of all Titian's works this is the most perfect



in execution. It combines an ideal conception with a felicitous breadth of handling, as well as a perfectness of composition, which rivals the noblest work of Dürer or of Dutch portraitists, and stands by itself in Venetian art.

Titian's last work was the "Pietà," which he left unfinished, and which was completed by Palma Giovane. He died in about his ninety-ninth year, on the 27th August, 1576, of the plague, which was then raging in Venice, and which was so virulent that very nearly one-third of the population succumbed to it.

When realizing the near approach of death he sought a last resting-place in the Chapel of the Crucifix in the Church of the Frari in Venice.

Dear to me (he wrote) are the mountains of Cadore and the rushing waters of the Piave and the murmur of the winds in the pine trees, where my home lies far away. But not there! In the city where I have laboured, in the church where I achieved my first triumph—bury me there. Promise to carry me there, and I will yet live to paint for you another Christ—a Christ of pity that should be more near to what He is than any that has yet been painted, even as I am by so many years nearer to seeing Him myself.

Owing to certain difficulties arising, however, he arranged to be buried in Pieve. Yet he was buried in the Church of the Frari as at first intended, and lies near his famous painting, the "Madonna di Casa Pesaro." Canova, by command of the Austrians, carved the monument which now marks his grave.

His Dignity of Manner

Titian was a man of commanding appearance, possessing a dignity and composure of manner which made him notable even in the highest assembly. No artist's life was more serene or self-contained. He moved all his days among lordly men and women, amid the world's pomp and splendour, himself an especial favourite of fortune.

This stateliness and composure are reflected in all his works. In him was found at its highest that which was the ideal of all Venetian painting—stateliness and power. All that serenity which comes from undisturbed security, that sense of ease and confidence which comes from wealth and power find their dignified expression in the works of one whom many do not hesitate to claim as unequalled in the technical excellence of his works.

[See "Titian, His Life and Times," by J. A. Crowe and G. B. Cavalcaselle (1877); and *Lives*, by J. Northcote (1830), G. Gronau (1904), and C. Ricketts (1910).]

BRILLIANT WRITERS of the 19TH CENTURY

Jane Austen, Mrs. Gaskell, Mrs. Browning, and Mrs. Humphry Ward, Who in Their Several Spheres have Held Aloft the Banner of English Literature

TO-DAY a large proportion of the novels published are by women, but a hundred and fifty years ago this was far from being the case. Indeed, in the eighteenth century there were few women writers of note. Jane Austen may be regarded as the greatest artist of her period, the fine flower of the expiring eighteenth century. Her best-known novel, "Pride and Prejudice," is still read and admired by those who appreciate the delicacy of style and the descriptive charm which characterize all Miss Austen's work.

Jane, who was the youngest of a family of seven, was born on the 16th December, 1775, at Steventon, in Hampshire, of which parish her father, the Rev. George Austen, was rector. On the maternal side, too, Jane Austen was very closely associated with the Church, for her mother was the daughter of a clergyman. That dry humorist, Theophilus Leigh, who for more than fifty years held the position of master of Balliol, was Mrs. Austen's uncle.

Jane's early years were passed in the peaceful and uneventful atmosphere of an English vicarage, where she seems to have led the same life as that enjoyed by most young girls of her class and period, although in the matter of education she reached a standard somewhat above the average. Languages, in particular, appear to have attracted her, for we read that she was a good French scholar and knew a certain amount of Italian. An omnivorous reader, she was specially devoted to the works of Crabbe, of whom she is reputed to have said, "if I ever married at all, I could fancy myself being Mrs. Crabbe."

While still a child, Jane Austen's greatest pleasure was the writing of little sketches and stories for the amusement of her family and her small circle of personal friends, and in

these early years she was undoubtedly much influenced by the works of both Richardson and Miss Edgeworth. We read, too, of Jane Austen and her elder sister, Cassandra, taking a prominent part in private theatricals, performed at the Steventon vicarage when the future novelist was only fourteen years of age.

The first twenty-six years of Jane Austen's life were passed in the Hampshire village, the only break in the pleasant monotony of her

THE AUTHOR OF "PRIDE AND PREJUDICE"



Jane Austen compares her writings to "a little bit (two inches wide) of ivory on which I work with a brush so fine as produces little effect after much labour."

days being occasional visits to an uncle at Bath. Her first published novel, "Sense and Sensibility," was originally written in the form of letters, and both this work and two of its successors, "Pride and Prejudice" and "Northanger Abbey," were composed at the Steventon vicarage.

In 1801 the Austen family settled in Bath, and for a time Jane seems to have abandoned her literary ambitions. Possibly she was depressed by the fact that she had not so far succeeded in finding a publisher to accept her work. "Pride and Prejudice" had been sent by her father to Cadell in the year 1797, but the manuscript had been returned the follow-

ing day with a curt note of refusal, the terms of which proclaimed to the unfortunate writer that her work had not even received a reading at the publisher's office.

"Northanger Abbey" also failed at first to find a publisher, though ultimately it brought posthumous fame to its author, being published the year after her death. Having been rejected by more than one publisher, the manuscript was actually sold outright in Bath in 1803 for the sum of £10. The purchaser, however, had not the courage to spend the money necessary for its production, and, when, years afterwards, one of Jane's brothers proposed to buy back his sister's work, the publisher was only too happy to accede to the request.

Not until the bargain was completed did he know that he had parted with the manuscript of an author of four published novels.

Jane Austen received but little recognition during her lifetime, and the sums paid for the books published before her death were pitifully small. For her first novel, "Sense and Sensibility," she received from Egerton in 1811 £150, and her total receipts for the four books which appeared while she was still alive—"Sense and Sensibility" (1811), "Pride and Prejudice" (1813), "Mansfield Park" (1814), and "Emma" (1816)—were under £700.

By disposition Jane Austen was unusually shy and retiring, even for the period in which

DEPICTER OF COUNTRY SOCIETY



Mrs. Gaskell is, perhaps, best remembered for her delightful pictures of society in the little country town of Knutsford (Cranford). These appeared originally in *Household Words*.

she lived. The works published during her lifetime all appeared anonymously, though their authorship was an open secret among her friends.

In the early part of 1805 Jane sustained a great loss in the death of her father, and after this sad event she, together with her mother and sister, went to live in Southampton, where she remained for some four years. Of this period of her life little of interest is recorded, and it was not until she settled in a cottage at Chawton, on the Hampshire estate of one of her brothers, in 1809, that her literary activities seem to have revived. In these last years of her life she composed her masterly

creations, "Mansfield Park," "Emma," and "Persuasion."

While she was nursing her brother in London in 1815, Jane had an amusing adventure. The Prince Regent, hearing of her visit through a physician who was in attendance on her brother, sent his chaplain to invite the novelist to dedicate her next book ("Emma") to His Royal Highness, and also to offer to escort her over Carlton House.

Suggestions for a Hero

Jane Austen took advantage of the Prince's permission in the matter of the dedication, but to the chaplain's suggestion that an appropriate hero for the proposed novel would be an accomplished clergyman, who should bear some resemblance to James Beattie's minstrel and the Vicar of Wakefield, she modestly explained that she did not feel competent to undertake such a task. Nothing daunted, the chaplain then recommended as an alternative, "a romance illustrative of the august house of Cobourg." Jane, however, did not receive the idea with any enthusiasm.

This anecdote reveals a trait which may account for much of the undoubted charm of Jane Austen's writings—she knew to a nicety her own limitations. Her plots are always of the simplest, and her aim seems to have been to depict accurately the commonplace domestic existence of cultured people.

Of her literary style and her choice and treatment of subjects there could be no apter description than that given by the author herself. She compares her writings to "a little bit (two inches wide) of ivory on which I work with a brush so fine as produces little effect after much labour."

The gifted novelist did not live long enough to enjoy the fruits of her genius. In 1816 her health broke down, and she died on the 18th July of the following year at Winchester, whither she had moved to be near a doctor of repute. She was buried in Winchester Cathedral, where her resting-place is marked by a simple slab of black marble.

Charlotte Brontë's Biographer

Another early woman writer of renown is Elizabeth Cleghorn Gaskell, who is, perhaps, best remembered as the author of "Cranford" and "Mary Barton," as well as for her delightful biography of Charlotte Brontë.

Born in London on the 29th September, 1810, she lost her mother when but a few weeks old, and was consigned to her mother's sister, Mrs. Lumb, who, with a crippled daughter, lived a humble and retired life at Knutsford, in Cheshire. Here Elizabeth lived until, at the age of fifteen, she was sent to a boarding school at Stratford-on-Avon.

Elizabeth's father had married again, and, until his death in 1829, the young girl paid occasional visits to the home of her birth. She does not, however, seem to have found the society of her stepmother particularly congenial.

Elizabeth was both clever and attractive, and before her marriage in 1832 to the Rev. William Gaskell there were several suitors for her hand. The first years of her married life were passed in Manchester, and here she devoted a good deal of time both to teaching and to works of charity in her husband's parish.

Her reputation as an author was definitely established on the publication of "Mary Barton" in 1848, but this was not Elizabeth's first appearance in print. As early as 1840 she had completed an account of Clopton Hall, near Stratford-on-Avon, which she offered to William Howitt, who readily accepted it for his work entitled "Visits to Remarkable Places."

After the death, in 1844, of her only son, Willie, Elizabeth Gaskell sought consolation by devoting herself regularly to story writing, and it was probably during this period of sorrow that "Mary Barton" was composed. The book was finished in 1847, and, after being rejected by several publishers, was finally accepted in the following year by Messrs. Chapman and Hall, who purchased the copyright for £100.

Its success was instantaneous. Although it was originally published anonymously, the secret of its authorship soon leaked out, with the result that Mrs. Gaskell received congratulatory letters from such men as Carlyle, Dickens, and Samuel Bamford. On the other hand, some of the prominent employers of labour in Manchester accused her of having "maligned the manufacturers" in her novel.

Among authors Mrs. Gaskell was definitely welcomed as a personality of importance, and when, in 1849, Charles Dickens gave a literary dinner to commemorate the publication of the first number of "David Copperfield," she was among the guests. Later, when Dickens was contemplating *Household Words*, he invited Mrs. Gaskell to co-operate with him, and

WHERE AN ENGLISH POETESS LIES SLEEPING



The beautiful tomb of Mrs. Browning in the English cemetery at Florence, designed by Lord Leighton. At Casa Guidi, the Brownings' home at Florence, Mrs. Browning wrote the well-known "Casa Guidi Windows," in which she champions the Florentines so valiantly.

when the first number of the new journal appeared in March, 1850, among the contributions was the first instalment of her story "Lizzie Leigh."

There followed in subsequent issues of *Household Words* a series of sketches of village life, culled largely from Mrs. Gaskell's recollections of her childhood days at Knutsford. Dickens himself took a particular interest in this series, and appears to have been personally responsible for the headings under which they appeared. It was these articles which were afterwards gathered together and published in book form under the title of "Cranford."

It seems almost certain that Mrs. Gaskell was at this time strongly influenced by the

mentality of Dickens. Indeed, it is possible to trace a very distinct resemblance between the characters depicted in her second important novel, "Ruth," and those drawn by Dickens in "Hard Times," which appeared in 1854,

A PRECIOUS BROWNING RELIC



This silver shell-shaped locket contains, on one side, a lock of Milton's hair and, on the other, a lock of Mrs. Browning's, which she gave to Robert Browning during their courtship.

nearly a year after the publication of Mrs. Gaskell's "Ruth."

One of Elizabeth Gaskell's intimate friends was Charlotte Brontë. It was at the earnest request of Mr. Brontë, after his daughter's death in 1855, that she undertook the arduous task of compiling the biography of Charlotte, around which so much controversy ultimately raged.

After the publication of the biography in 1857 the truth of certain statements, made by Mrs. Gaskell as a result of information given to her by Charlotte Brontë herself during her lifetime, was hotly challenged by the people implicated. Finally a retraction was made by the author in *The Times*, and the first edition of the biography was withdrawn from circulation.

That Mrs. Gaskell had reproduced what she

sincerely believed to be an accurate picture is beyond doubt, as is the fact that she sought in later editions of her life of Charlotte Brontë to repair any injustice she had unwittingly done to the persons concerned. Nevertheless, the adverse publicity given to her work in its original form so distressed the author that she conceived a temporary distaste for writing, and occupied herself for the next few years almost exclusively with work of a domestic and social character.

Relief Work in Cotton Famine

For a time she came under the influence of Thomas Wright, the prison philanthropist, and in the cotton famine of 1862-63 she took a prominent part in the organization of relief work for the benefit of the distressed workers, often labouring for seven or eight hours a day. After her strenuous charitable work during the famine Mrs. Gaskell once more turned her attention to writing, and towards the beginning of 1863 she published a new novel, entitled "Sylvia's Lovers," a work which dealt with the activities of the press gang in the latter half of the eighteenth century.

In 1864 there began to appear in the *Cornhill Magazine* what was destined to be Mrs. Gaskell's last story, "Wives and Daughters." During the writing of this work the author's

THE AUTHOR OF "AURORA LEIGH"



Mrs. Browning is entitled to rank high among English writers by reason of her breadth of vision and the strength and purity with which she portrays romantic passions.

health began to fail. Indeed, the later instalments only appeared after her death, and when "Wives and Daughters" was reprinted in February, 1866, it was published as "an unfinished work."

The end of Elizabeth Gaskell's life came peacefully and suddenly. On the morning of the 12th November, 1865, while talking with her daughters, she was seized with a heart attack, and "carried away without a moment's warning," according to the epitaph on her tombstone in the little graveyard of the Unitarian chapel at Knutsford, where she was buried.

Author of "Aurora Leigh"

A nineteenth-century poetess of eminence was Elizabeth Barrett Browning, author of the ever-popular "Sonnets from the Portuguese" and "Aurora Leigh," "a novel in verse."

Mrs. Browning's work has often been severely attacked by the more pedantic of the critics. That much of it contains such defects as a certain forcing of phrasing, coupled with a corresponding lack of variety and humour, is indisputable, but, on the whole, its merits far outweigh its faults. Mrs. Browning is undoubtedly entitled to rank among the foremost of modern poetesses, by reason of her breadth of vision and the strength and purity with which she deals with the portrayal of romantic passions.

Born in 1806, Elizabeth was the daughter of Edward Moulton, a Jamaica planter. She was christened Elizabeth Barrett, and not long afterwards, on succeeding to some property, her father took the name of Barrett. Thus, properly speaking, his daughter became Elizabeth Barrett Moulton-Barrett.

Elizabeth's childhood was passed among the happiest surroundings at her father's home near Ledbury, in Herefordshire. A delicate and imaginative child, she was from her earliest years devoted to study. At the age of eight she read Homer in the original, and, as she grew older, her mastery of modern languages was amazing—particularly as she was severely handicapped by chronic ill-health.

Favourite Childhood Hobby

As a baby Elizabeth was weakly, and when she was about fourteen years of age, she fell from her pony and injured her spine so severely that for years she was an invalid. Indeed, she never entirely recovered her strength. Elizabeth's favourite childhood hobby was gardening, and she was renowned throughout the countryside for her skill in growing white roses. In after years, when she had moved from the countryside of her youth, she made the roses bloom again in the lines of her "Lost Bower." Her serious occupation was always

writing. She started composing poetry at the early age of eight, although her first published work, an "Essay on Mind," did not appear until she was twenty.

It was about this time that serious trouble first overtook Elizabeth, for the death of her mother was followed by financial embarrassments, which caused her father to give up his beautiful Herefordshire house. The family migrated to Sidmouth, where they lived for two years, when Mr. Barrett bought a house in London (74 Gloucester Place). By this time Elizabeth was becoming renowned as a writer, and by 1838 she had published "The

THE COUNTRY HOME OF MRS. WARD



Stocks," Mrs. Humphry Ward's house near Tring. Mrs. Ward's activities were not confined to novel writing. She founded schools and settlements, and did admirable work during the World War.

Seraphim" as well as "Prometheus" and other poems.

The young poetess now sustained a severe shock in the death of her favourite brother, and the sad circumstances of her loss overshadowed the remainder of her life. She had to leave London in 1838 for the sake of her health, and, while staying at Torquay, her brother had two of his friends to visit him. All three men were drowned while boating in Babbacombe Bay. Rumours of the disaster reached her ears, to be confirmed after three days' suspense. After this tragedy Elizabeth became seriously ill, and when at length she sufficiently recovered to be taken to her house in London, it was to the seclusion of a sick-room that she went.

For the next six years Elizabeth remained almost completely an invalid, and received few visitors beyond the members of her own family. She was not idle during those years of retire-

ment, for we hear of her "resting on her couch, with her dog Flush lying on the floor beside her, and reading books in almost every language."

Elizabeth first met Robert Browning in the spring of 1846, when he was brought to her father's house by a friend, and after a very brief engagement the couple were secretly married in the autumn of the same year. Elizabeth's father did not approve of the marriage, and he never forgave his daughter for her defiance of his wishes.

The doctors having urged upon Elizabeth the necessity of leaving England for the

THE CREATOR OF "ROBERT ELSMERE"



Powerful though it is as a piece of dramatic fiction, it was largely its discussion of the "higher criticism" and the interest this aroused that made Mrs. Ward's "Robert Elsmere" so tremendous a success.

winter, the newly married pair went abroad as soon as they were married. After spending some time in Paris and in leisurely wanderings through Italy, they ultimately settled down in Florence, where their son was born in 1849.

The Brownings settled down to a tranquil and uneventful life in their Florentine home, but neither the cares of domesticity nor the responsibilities of motherhood lured Elizabeth from her literary labours. Both "Aurora Leigh" (in part) and "Casa Guidi Windows" were written in Florence, as well as many of her later poems, in which her sympathy for the country of her adoption is clearly shown.

Elizabeth Browning died at Florence on the 30th June, 1861.

When, in February, 1888, the year after the Victorian Jubilee, that daring novel, "Robert Elsmere," was published, its author sprang into fame overnight, and hot controversy raged throughout two continents round the name of Mrs. Humphry Ward. Half a million copies was the author's own modest estimate of her first year's sales, but in reality they were far higher.

Granddaughter of a Great Schoolmaster

Mary Augusta Ward was the daughter of Thomas Arnold (second son of the famous Arnold of Rugby), and was born at Hobart, Tasmania, on the 11th June, 1851. When she was five years old, the family migrated to England, and the future novelist was sent to be educated at Miss Clough's school, near Ambleside. By the time she was fourteen years old Mary had developed a definite personality of her own, though so far she showed no particular interest in writing. It was, indeed, only after her marriage, at the age of twenty-one, that she developed her gift as a novelist.

She began writing as early as 1881, but it was in 1888, with "Robert Elsmere," that her first great success was achieved. Although none of her later works equalled this book in popularity, her standing as an author was definitely established.

Mrs. Humphry Ward's activities were by no means limited to novel writing. She was the author of several plays and the founder of the Passmore Edwards Settlement. Indeed, she excelled at organization, and all her life was associated with the founding of various schools, settlements, and colleges.

Work in the World War

Had she neither written books nor founded settlements, she would still have deserved to be remembered gratefully by her country for the work she did during the World War. Although over sixty years of age on the outbreak of hostilities, she laboured unceasingly for the cause of the Allies. In its early stages she travelled to America in the interests of propaganda, while in England she not only organized play centres and invalid schools, but personally supervised the running of these institutions and kept them in working order until the day of her death.

On her death on the 24th March, 1920, she was mourned no less by the sick and needy, among whom she had so ardently laboured, than by the admirers of her literary achievements.

For biographies not included in the Groups see Detailed Index

TWO MAKERS of DELIGHTFUL OPERAS

How the Wonderful Partnership of William Gilbert and Arthur Sullivan Gave to the World a Series of Light Operas that Will Live for Ever

"A GILBERT is of no use without a Sullivan, and I can't find one," lamented the former, three years after death had broken a wonderful partnership.

Had Gilbert died first, Sir Arthur Sullivan might have expressed a similar regret. Both writer and musician, however, had earned a reputation apart from the operas they created together. Gilbert was famous as the author of "The Bab Ballads" when he first met Sullivan, and the latter had composed his music to *The Tempest*—considered by many to be his highest achievement—long before he linked his name with the greatest master of drollery in the English language.

In such a partnership it is always difficult to do justice to the share of each. Sullivan had a deeply serious side to his artistic nature, as is shown by his religious music. Gilbert was a pure humorist, whose chief mission in life was to make fun of the too seriously inclined. It is difficult to believe that the librettist of the Savoyard operas ever accepted anything in life as being very serious. Like all pure humorists his reputation has suffered a little from the passage of time, although the "Gilbertian" tradition still remains immortal on its high pedestal.

Sullivan has, on the whole, left behind him a more solid and enduring achievement. It is, perhaps, a little strange to think of the composer of the *Te Deum* and *In Memoriam* as being so closely allied, on one side of his temperament, with Gilbert, the irrepressible and whole-hearted maker of fun. Yet such was the case, for where their joint work is concerned, the two minds are inseparable. Sullivan, casting off his mantle of seriousness, becomes

an absolute Gilbertian in terms of music; he is just as exuberant and humorous as his partner, and he makes sound the servant of laughter as skilfully as he controls it in the expression of deep emotion.

Arthur Seymour Sullivan, the younger of the two partners, was born in London on the 13th May, 1842, of Irish and Italian parentage. The southern element in his blood, derived from his mother, was particularly noticeable in boyhood,

COMPOSER OF GRACEFUL MUSIC



Though Sir Arthur Sullivan wrote some exceptionally fine religious music, to-day he is chiefly remembered for the delightful operas he composed in collaboration with W. S. Gilbert.

when his swarthy skin and thick, dark, curly hair made him a romantic figure on the concert platform. It was, however, from his Irish father, the accomplished bandmaster of Sandhurst and Kneller Hall Military Colleges, that he derived his musical talents.

By the time he was eight years old, Sullivan could play the flute, clarinet, horn, cornet, trombone and euphonium. His knowledge of these instruments, derived from hard experience in his father's orchestras, was not, as he said himself, "a mere acquaintanceship, but a lifelong and intimate friendship."

It was as a singer that Sullivan won his first precocious honours. While still at school he told his father of his ambition to become a member of the choir, either at the Chapel Royal or Westminster. The bandmaster did not think this course would provide his son with a good enough musical education, and he declined to move in the matter. Thereupon Sullivan, with characteristic impulsiveness, confided in the headmaster of his school at Bayswater, and obtained through him an introduction to the Rev. Thomas Helmore, the master of the Chapel Royal choristers.

Sullivan sang several solos in an exceptionally

good treble, and was approved for his intelligent and sympathetic rendering of the songs. With this flattering report in support of his claim, he prevailed upon his father to give his consent for him to join the school.

The twelve-year-old chorister was very proud of his profession, especially of the "gold clothes" that were worn at concerts. Often, however, the gorgeous liveries of the choristers excited the ridicule of street-urchins, and once, on the way to Buckingham Palace, Sullivan was obliged, as he wrote to his parents, to put up "a desperate defence" against these rude-mannered rough-handling critics.

Composes His First Anthem

Soon he became head boy and composed his first anthem. This was praised by Sir George Smart, the organist at Chapel Royal, who told Sullivan that if he had the parts copied out he would try to obtain the Dean's permission for the work to be sung in church. This was done, and the Dean subsequently sent for Sullivan, congratulated him upon his composition, gave him half a sovereign, and expressed the hope that he would one day write a great oratorio.

While he was a chorister, Sullivan had the great privilege of singing on the same concert platform with Jenny Lind. The oratorio in question was *Elijah*, and when Sullivan returned to the school, he sat on the staircase for three hours after the other boys had gone to bed, dreaming and thinking about the wonderful experience.

Years afterwards, when Jenny Lind was an old woman, she came to see Sullivan, and sang to him, and her voice and personality had the same magical effect upon him. "The tears came to one's eyes," he wrote, "so deep and true was the rare spirituality of her temperament."

Wins a Music Scholarship

In the early part of 1856, Sullivan entered for the recently instituted Mendelssohn Scholarship for promising musical students. He was then a few weeks over fourteen years of age and only just eligible for entry. When the result was declared, Sullivan learned that he had tied with Joseph Barnby, the eldest of the competitors. A further trial took place, and Sullivan emerged triumphant.

Keenly alive to the fact that his victory made him the most promising musical scholar in England, Sullivan decided that he had learned everything that schools in this country could teach him, and went to Leipzig. Here, in the home of music, he found that he had almost everything to learn and a great deal to unlearn. With the aid of an extension of the Mendelssohn Scholarship, he was able to continue his studies, under Liszt and other teachers, for two years.

On the 5th June, 1860, Sullivan conducted an orchestra for the first time. He felt full of confidence. "It was such fun," he wrote home, "standing up there and conducting that large orchestra. I can fancy mother saying: 'Bless his little heart! how it must have beaten. . . .' But I wasn't in the least nervous, only in one part, where the drum *would* come in wrong at the rehearsal, but he did it all right in the evening. I was called forward three times at the end and enthusiastically cheered."

His Genius Recognized

Before leaving Leipzig on the 11th April, 1861, he had composed a quartet which was performed several times and finished his incidental music to *The Tempest*. This was played at the Crystal Palace concert on the 5th April of the following year. Sullivan immediately leapt into the front rank among the younger English composers.

One of the first to offer his congratulations was Charles Dickens, who said, "I don't profess to be a musical critic, but I do know that I have listened to a very remarkable work." That was the beginning of a staunch friendship between the older novelist and the younger musician. It was through Dickens that Sullivan came to know many prominent writers and dramatists of the day and so gradually felt his way towards the career of an operatic composer.

He met Tennyson—whom he begged "not to mix up his iambs and spondees," as it made his songs so difficult to set to music—George Du Maurier and Sir Francis Burnand, both of *Punch* fame, and ultimately William Schwenck Gilbert, who was then the doyen of a circle of brilliant wits and raconteurs.

Post as Stage Organist

For some time after he set up as a musical composer, however, Sullivan found it difficult to earn a living. Several of his settings for Shakespearean songs that are now considered little masterpieces were composed in great haste and sold outright for five guineas apiece. Sullivan was glad to eke out his meagre earnings as a teacher of music, and he was greatly relieved when Michael Costa, director of Covent Garden Theatre, offered him a permanent post as stage organist and, at the same time, commissioned him to write a ballet.

Before attempting this work, Sullivan determined to master the technique of the stage. From his organist's gallery he looked down on the vast stage during the performances of well-known operas, and studied every detail of stage art, from that of the *première danseuse* to that of the scene painter. At the rehearsals he astonished the musical director by his apt suggestions and the rapidity with which he could improvise variations enabling dancers to



AN EXQUISITE SCENE FROM A MOST SUCCESSFUL OPERA



In 1875, Gilbert and Sullivan achieved their first unqualified success with a brief opera, a curtain-raiser, called *Trial by Jury*. Their next production, *The Sorcerer*, followed two years later, and was staged at the Opera Comique. The above photograph, taken during a recent revival of *The Sorcerer*, depicts one of the scenes wherein the central figures are Sir Marmaduke Pointdextre and Lady Sangazure.

show off their best steps, or even to help out the different scenic effects.

L'Île Enchantée, Sullivan's first ballet, was produced in 1864. It was, perhaps, chiefly remarkable as its composer's first exercise in the medium which he had set himself to master. A cantata, *Kenilworth*, and an overture to a projected opera, *The Sapphire Necklace*, were performed at Birmingham in the same year and considerably enhanced Sullivan's reputation as a melodist of no small merit.

A Jest Materializes

It was while dining one evening with Du Maurier and Francis Burnand that Sullivan, half in jest, suggested the idea of composing a musical extravaganza based upon a farce, *Box and Cox*, which was at that time very popular. His companions took the matter more seriously and begged Sullivan to try his hand at writing humorous music.

The work was carried out with extreme rapidity, and, at the last moment, Sullivan, still doubtful about so fresh a departure, postponed

the composition of the orchestral accompaniment until the play had actually been rehearsed.

He had written the music for the songs, but on the day before the opening performance at the Adelphi Theatre there were no band parts ready for the orchestra. This was the heaviest part of the work, the music for each instrument having to be written out separately.

Working Through the Night

Relying upon his prolific inventive genius and rapidity of composition, Sullivan assured the agitated stage manager that the parts would be ready by the morning. He engaged two copyists, who worked throughout the night transcribing the music as Sullivan hastily composed it and scribbled it down.

Sullivan had never any doubt about his ability to finish the work, but he reckoned without the limitations of ordinary people. At seven in the morning he found both the copyists fast asleep. It was impossible to arouse them, and so Sullivan, having laboured all night at the composition of his score, spent the rest of the

morning in copying it out. Somehow, the parts were got ready for an early rehearsal.

Many of Sullivan's compositions were produced under similar conditions. *Contrabandista* (1867), another extravaganza, was composed, scored, and rehearsed in a period of sixteen days from the time of receiving the libretto. The overture to *Iolanthe* (1882) was written between dusk and dawn, while the composition of the magnificent cantata, *The Golden Legend* (1886), occupied only a single day.

A Writer of Burlesque Comedy

Sullivan was introduced to Gilbert in 1871, by Frederick Clay, a performer in a German Reed entertainment. The two men instantly recognized in each other that common vein of humour which was to bring about their artistic partnership. Gilbert was then widely known as a brilliant writer of burlesque comedy, and all the town was reciting his ballads, "The Bishop of Rum-ti-Foo" and "The Discontented Sugar Broker."

Born in London on the 18th November, 1836, William Schwenck Gilbert was a direct descendant of Sir Humphrey Gilbert, the Elizabethan navigator. Something of his ancestor's adventurous disposition stirred in his blood as a young man, for he wanted to join the army. He was bitterly disappointed when the sudden termination of the Crimean War checked his military ambitions. Later on, however, he became a captain in the volunteers.

His father, William Gilbert, had, late in life, achieved some reputation, although not wide popularity, as a novelist of the picaresque school. Some of these novels, illustrated by his son, show traces of a rich vein of humour, but their author was a tired and world-weary man before he attempted literature, and he had neither the elasticity nor the sustained power which the younger Gilbert developed. He lived long enough to act as a most valuable critic of his son's earlier efforts.

Clerk in the Civil Service

Gilbert began to scribble rhymes almost as soon as he could write. He was educated at Boulogne and at Ealing, and subsequently graduated at London University as a Bachelor of Arts. He entered the Civil Service as a clerk in the education department. After four years he found the routine of office work intolerable, and resigned his position in order to study for the Bar.

He had already begun to contribute the "Bab Ballads" to *Fun*, which was edited by H. J. Byron, a popular burlesque writer of the day. *Punch*, curiously enough, saw no future for the budding humorist, and persistently rejected his efforts. Gilbert's literary talent at this time was not of the robust kind likely to

win him immediate livelihood, and he was obliged to continue his legal studies. He was called to the Bar in 1864, and practised on the northern circuit, becoming a magistrate in 1891.

Some time before the publication of the "Bab Ballads" in book form (1869) made Gilbert's name familiar to a wider audience than that possessed by *Fun*, he had a chance of trying out his powers as a writer for the stage. The lessee of the St. James's Theatre, Miss Herbert, found herself without a suitable piece with which to attract audiences at Christmas time. She appealed to T. W. Robertson, then enjoying his all-too-short vogue as a dramatist, and he told her that Gilbert could produce what she required in the minimum of time.

Play Written in Ten Days

The result was *Dulcamara* (1866), a burlesque of the well-known opera *L'Elsire D'Amore*. Gilbert wrote the play in ten days, and it was rehearsed within a week. Being wholly inexperienced in the commercial side of literary work he accepted £30 for the piece, without royalties, afterwards bitterly regretting the bad bargain, for *Dulcamara* proved a considerable success.

Two fairy plays, *The Palace of Truth* (1870), produced by Mr. and Mrs. Kendal at the Haymarket Theatre, and *Pygmalion and Galatea* (1871), were also to Gilbert's credit before he found in Sullivan the ideal collaborator for the style of comic libretto that he wished to write.

At that time the English stage was inundated by French comic operas of a stereotyped order. Gilbert, as dramatic critic to the *Illustrated Times*, saw many of these, and before he met Sullivan he had made up his mind the time was ripe for an English comic opera, which would depend for its appeal upon freshness as compared to the stale formula of the French school, and upon a vigorous revival of national interests and sentiments.

Some of his ideas he must have discussed with Sullivan, for, although their first joint effort, *Thespis; or The Gods Grown Old* (1871), was very hastily written, it contained the germ of the new form of comic opera and struck a death-blow at the antiquated opera-bouffe, with its lifeless choruses and trite music and ballet, then in vogue. Gilbert superintended the rehearsals himself and insisted upon innovations that shocked and disturbed the conservative minds of the principals.

Reorganizes the Chorus

At that time the "chorus" was regarded as little more than a stage audience, but Gilbert introduced a "live" chorus, rehearsing each individual with the utmost care and inventing "lines" for them. This caused heart-burnings among some of the leading actresses, who resented Gilbert's despotic manner, and objected

to so much attention and consideration being given to supernumeraries.

"Really, Mr. Gilbert," said one of the actresses, "why should I stand here? I am not a chorus girl."

"No, madam," retorted Gilbert, in a most sarcastic manner, "your voice is not strong enough, or no doubt you would be."

In spite of Sullivan's exquisite musical setting, the novelty of a "live" chorus, and Gilbert's witticisms, *Thespis* was not a success. The public, so long inured to staleness, seemed unable to respond to the freshness and simplicity of the new opera form. It was startled and disconcerted by the dazzling originality of the joint authors.

Their First Success

Not until four years later did Gilbert and Sullivan achieve their first unqualified success, and then it was in the form of a curtain-raiser, a soupçon to more solid dramatic fare. Early in 1875, Mr. D'Oyly Carte, a theatrical manager with a genius for discovering talent and believing in it, approached Gilbert and asked him to write a short piece for which Sullivan could compose the music. When Gilbert had written the dialogue he read it to Sullivan, with some faint misgivings as to the latter's opinion of its merit.

"It was on a very cold morning," said Sir Arthur Sullivan, afterwards describing the occasion, "with the snow falling heavily, that Gilbert came round to my place, clad in a heavy fur coat. He had called to read over to me the MS. of *Trial by Jury*. He read it through, as it seemed to me, in a perturbed sort of way, with a gradual crescendo of indignation, in the manner of a man considerably disappointed with what he had written. As soon as he had come to the last word he closed up the manuscript violently, apparently unconscious of the fact that he had achieved his purpose so far as I was concerned, inasmuch as I was screaming with laughter the whole time."

Soon, all London was doing the same. *Trial by Jury*, brief as it is, still remains one of the most popular of the Gilbert and Sullivan operas. It was followed by *The Sorcerer* (1877), *H.M.S. Pinafore* (1878), *The Pirates of Penzance* (1880),

and *Patience* (1881). This last opera, in which Gilbert deliciously satirized the supersensitive school of poets then in vogue, was so successful, that D'Oyly Carte, who had undertaken the responsibility for the productions, was able to build the Savoy Theatre where, in 1882, *Iolanthe* was performed. This production was followed by *Princess Ida* (1884), *The Mikado* (1885), *Ruddigore* (1887), *The Yeomen of the Guard* (1888), and *The Gondoliers* (1889).

The opening of the Savoy Theatre was in

BREACH OF PROMISE ON THE OPERATIC STAGE



A glimpse into the delights of *Trial by Jury*. The defendant in the Breach of Promise case pleads that his fickleness of heart is in obedience to the laws of Nature, "for Nature is constantly changing," he sings.

itself a memorable event. Electric light took the place of the old gas flares, improved methods of ventilation were introduced, and the refreshment bars were arranged upon a model scale. Both Gilbert and Sullivan took a keen interest in the appointments of the new theatre, which had been erected in their honour, and not a little of the continued success of their operas was due to the indefatigable work that they carried out at rehearsals.

Before the production of *H.M.S. Pinafore*, the two authors travelled to Portsmouth together and spent some hours studying Nelson's battleship, the *Victory*. They returned with their notebooks crammed with sketches of the vessel from the quarter-deck to the minutest ring-bolt, and halyard. Not a quarter of these realistic details were introduced into the scenery, but those that were, added tremendously to the general effect. It was one of Gilbert's maxims as a stage-manager that no pains should be spared over exactitude in matters of detail.

Curiously enough, it was over an almost ludicrously small matter in connexion with the upholstering of the Savoy Theatre that Gilbert and Sullivan quarrelled. It had been suggested that a carpet would enhance the appearance of the foyer. Sullivan agreed to the expenditure of £140 on the carpet, but when the matter was brought to Gilbert's notice he objected on the ground of unnecessary extravagance. An altercation took place, and for some while afterwards there was a coolness between the two friends.

Probably there were other and more deeply rooted reasons for the estrangement, which the affair of the carpet brought to a head, but for a considerable period Gilbert and Sullivan refused to see each other, and, in the meantime, both writer and musician vainly tried to find some other suitable collaborator.

LIBRETTIST OF WORLD RENOWN



After the death of Sullivan, Gilbert attempted several operas in collaboration with other musicians, but he had lost his ideal partner and he never found another Sullivan.

Mutual friends at length brought about a reconciliation, and, after the production of *Utopia, Limited* (1893), the authors appeared in front of the curtain and shook hands before an audience of admirers almost wild with joy at the happy reunion.

Sullivan was knighted in 1883. His co-operation with Gilbert by no means exhausted his powers. He composed many oratorios, cantatas, and songs, and was in frequent demand as a conductor at musical festivals. His "In Memoriam," written immediately after his

father's death, revealed the depth of emotion which could be brought into the compass of his musical genius. Some of his songs, such as "The Lost Chord," which he composed by the bedside of a sick brother, were so popular at the time that they now seem hackneyed, but the bulk of his musical activity has become a permanent part of the nation's musical heritage.

Devotion to His Mother

Sullivan was devoted to his aged mother and nothing pleased him better than to escape from the glamour of the stage and spend a few quiet hours in her company at the quaint old Georgian mansion in Fulham, where she lived. He was also an ardent traveller, and spent much time abroad in company with his faithful valet.

During these trips he composed at odd moments, and in any circumstances, being quite independent of environment for the stimulus to creative effort, and not requiring a piano in order to verify the product of his imagination. He was, perhaps, more prolific than any other English composer, and could tap out a new tune to suit an occasion at a moment's notice.

One evening he strolled into the Savoy Theatre during the performance of *Iolanthe*. Not being able to find a seat, he stood behind the barrier in the dress-circle. Presently he began to hum one of his own tunes, as though to test the accuracy of the orchestral rendering. Completely lost in the occupation, he apparently forgot the presence of the audience, one of whom presently turned round and remarked angrily, "Look here, Sir, I paid my money to hear Sullivan's music—not yours."

Mourned by a Great Public

Sullivan died on the 22nd November, 1900, and was buried in St. Paul's Cathedral. He was mourned not only by those who appreciated the religious side of his musical genius and the renewed stimulus he had given to English music, but by the devotees of the Savoyard operas, to whom the delicate humour of his lighter music appealed as much as the drolleries of his brilliant librettist.

The remark that Gilbert passed three years after Sullivan's death proved only too true. Deprived of its natural co-adjunct, Gilbert's whimsical muse languished, and, although he attempted several operas in conjunction with other musicians, the result was never that complete fusion of minds which had crystallized into perhaps the most perfect form of light entertainment that has ever been performed in an English theatre. Gilbert, who married Lucy Agnes, daughter of Captain Turner, in 1867, was knighted in 1907, and died in 1911.

[See "Sir Arthur Sullivan," by A. Lawrence (1899); and "Gilbert, Sullivan, and D'Oyly Carte," by E. Oller and C. Bridgeman (1914).]

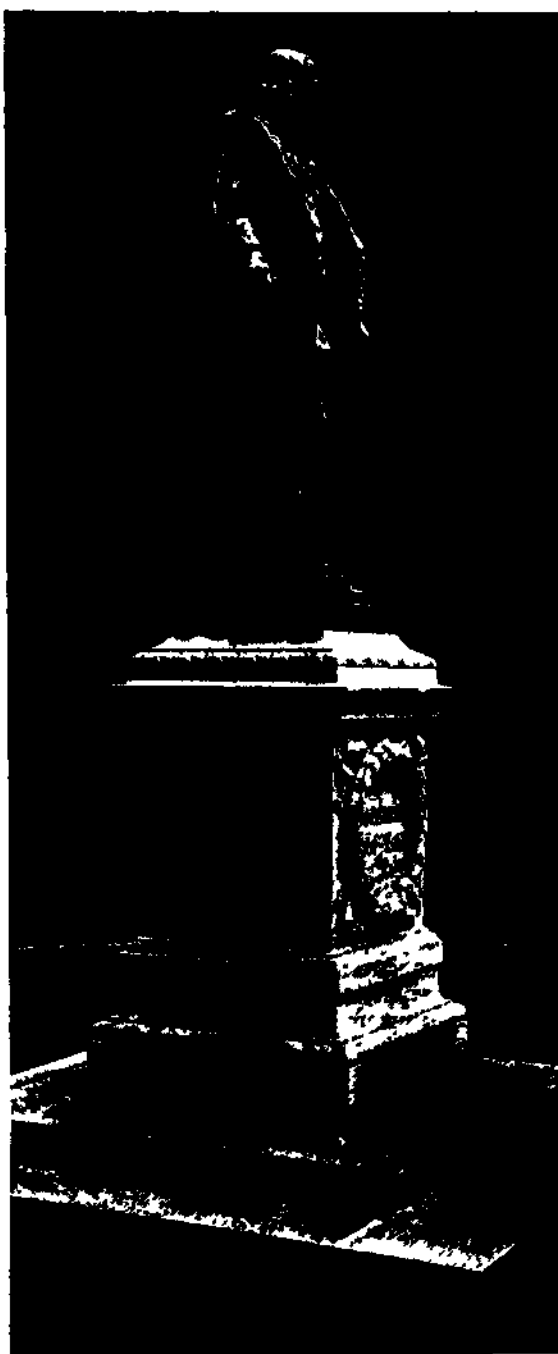
For biographies not included in the Groups see detailed Index

A REORGANIZER of the SCIENCES

Francis Bacon's Work for Posterity, and How He Cleared the Undergrowth and Discovered the Roads Which Later Men of Science Have Trod

"LORD BACON," as Francis Bacon, Baron Verulam and Viscount St. Albans, is universally but inaccurately called, is generally remembered as one of the great men of English history, who rose to the highest rank only to fall suddenly from power. He is remembered as the great and venal Lord Chancellor of James I. But Lord Chancellors succeed one another in an unending, and more or less unimposing procession, and though Bacon, so far as can be judged, discharged the duties of his office admirably, his fame really rests upon his eminence as a scientist, a philosopher, and a man of letters.

The younger son of Sir Nicholas Bacon, lord keeper at York House in the West Strand, he was born on the 22nd January, 1561. His mother's sister was the wife of Lord Burghley, Queen Elizabeth's great minister and adviser, so that Bacon was born into an influential political family, which, though not rich, kept up the style usual among Elizabethan noblemen. Little is known of his childhood, but he was extremely delicate and received his earliest education from his mother, an erudite and extremely religious woman. He appears



Statue of Bacon in Gray's Inn, London. Bacon was a very brilliant lawyer, and among the important cases in which he was concerned was the trial of Queen Elizabeth's favourite, the Earl of Essex. He became Lord Chancellor in 1618.

also to have amused Queen Elizabeth with his childish sharpness of wit, and she would often confer with him, in mock gravity, on matters of State. The little boy delivered his opinions with such weight and artless affectation of maturity as to delight the grimly witty queen, who dubbed him "her young lord keeper."

In April, 1573, Bacon went up to Trinity College, Cambridge, where he lived for three years with his elder brother Anthony. Although the years he spent at Cambridge must have had a paramount influence on the formation of his mind and character, little or nothing is known of what he did there. Apparently though, in spite of his youth, Bacon applied himself most diligently to the sciences as then taught, and came to the conclusion that both the methods used and the results obtained by them were stupid, and quite fictitious. He, therefore, resolved that "one day" he would thoroughly investigate the whole question.

In 1576, when only fourteen years old, Bacon, as the son of a distinguished lawyer, was admitted to Gray's Inn. This admission, however, was little more than a formality, for a few months

afterwards he was sent abroad to Paris in the suite of Sir Amyas Paulet, then English ambassador at the French Court. For three years Bacon remained in France, travelling all over the country, which was then in a very disturbed state, and doubtless learning much destined to be of use to him in his future political career. His residence in France was brought to a sudden end in February, 1579, when his father died.

Left to His Own Resources

By his father's death, Francis Bacon became comparatively poor. His brothers were all provided for, and it had been Sir Nicholas' intention to buy an estate for his youngest son, but the suddenness of his death prevented this plan from being carried out. Bacon, therefore, found himself thrown on to his own resources, and he had to set to work and carve out a career for himself. Already he had vowed that he would ultimately devote himself to the discovery of truth for the good of the human race, but for the time being he was faced by the problem of ways and means. He was not at all the man to starve in a garret while devoting himself to some *magnum opus*, so he resolved to seek for preferment under the State and to amass a fortune as the first step towards the realization of his real ambitions.

During the next ten years he was zealously seeking places, with small and varying success. It is generally suggested that this was due to the hindrances placed in his way by Burghley and his son, Lord Salisbury, who knew their young relative's ability, and desired no more family competition. He worked assiduously at the Bar, sat as Member of Parliament for Melcombe in Dorsetshire, and generally made a name as a most useful, capable, and infinitely obliging young man.

First Plum of Patronage

In 1589 the first plum of patronage came his way as a reward for some pamphlets he had written supporting the Government in the Marprelate controversy. It consisted of the reversion of the clerkship to the Star Chamber, worth about £1,600 a year. The reversion, however, did not happen to fall in for nearly twenty years, so it was, as Bacon rather bitterly remarked, "like another man's ground but tailing (abutting) onto his house, which might mend his prospect, but did not fill his barn."

So Bacon still had to continue his life of a place-hunter, borrowing money to live as best he could, and intriguing the while for the post of Attorney-General. His patron, at this time, was Elizabeth's favourite, the Earl of Essex, through whom he importunately sued her Majesty for this or some other office.

Elizabeth, however, refused to grant him any favours, so Bacon grew hardened and cynical, and his character took on that mercenary complexion which, later on, made him appear so despicable.

He made himself Essex' right hand, serving that arch-intriguer faithfully and well. He was Essex' "ghost," as it were, writing all his speeches, letters, and billets-doux, formulating his policy, and ordering his affairs. During the years 1596-1600 Essex was under a cloud, and more or less a prisoner, but in the latter year, thanks entirely to Bacon's skill, he was liberated from all restraint, though not restored to favour.

Plot to Seize Elizabeth

Essex now plunged into the wildest intrigue. He had fallen from Elizabeth's favour and no longer enjoyed her confidence. Raleigh, Cobham, and Cecil, his enemies, were in high favour at Court. He, therefore, resolved to hazard all his fortunes in one desperate attempt to oust these new favourites, and to establish himself once more close to the throne. He hatched a foolhardy plot, whose aim was to seize the queen by force, giving it out as an excuse that Raleigh and Cecil, bought with Spanish gold, were contemplating her death themselves.

Some rumour of Essex' intentions reached the Court, and precautions were taken to assure Elizabeth's safety. Foiled in this direction, Essex made a despairing effort to rouse the City of London, and enlist its sympathies on his own behalf. On the 8th February, 1601, he rode through the city to St. Paul's, calling all men to arms. None responded except with derisive laughter or cries of anger. Thus the last of Essex' conspiracies ended in a complete fiasco, and he was arrested.

All who might be suspected of complicity in Essex' schemes were now examined most carefully, and the whole of the facts soon came to light. As a result of these inquiries Essex and the Earl of Southampton—the latter only a boy in years—were placed on trial.

Essex Condemned to Death

Coke took charge of the prosecution, and Bacon, as one of the queen's counsel, assisted him. Coke badly mismanaged the case, and it was largely owing to Bacon's assistance that Essex was finally condemned to death. Since he was conversant with his late master's intrigues from beginning to end Bacon was, of course, easily able to prove him guilty.

For his part in this affair Bacon was naturally held up as an example of bad faith and base ingratitude. Nor can he be excused for betraying his patron. But we should remember that Elizabeth's Court seethed with

perpetual plots and villainous intrigues, from which none of the men who surrounded the queen abstained. Had all been told in open court when Essex stood on trial, half the great names of England would have been implicated. The whole political life of the country was undermined by continual conspiracies of this kind. No sooner did one fail than another was hatched. Therefore, to his contemporaries, Bacon's conduct, though disgraceful, did not appear so heartless as it appears to-day. He had to save his own skin somehow, and he did so by aiding the prosecution with his special knowledge of the affair. Had he not done so, he would undoubtedly have been so damaged by what came to light that his future career would have been completely ruined.

Improved Prospects

With the death of Elizabeth and the accession of James I, Bacon's prospects definitely improved. The new monarch was full of learned hobbies and philosophic ideas, and Bacon saw in him a personality susceptible to his own subtle form of address and flattery. To please James, he wrote and published a work called a "Brief Discourse Touching the Happy Union of England and Scotland." In Parliament, moreover, he strenuously advanced anything James favoured, and in consequence he was soon rewarded with a pension.

A pension, however, hardly satisfies a man who aims at filling the greatest offices of State, so Bacon continued to work for preferment as hard as ever before. At length, in 1604, his persistence brought him his first substantial reward, and he was made a learned counsel, the office for which he had schemed so desperately. Once his feet were firmly planted on the ladder of promotion, he began to mount upwards quickly enough. In 1607 he became Solicitor-General, and in 1608 his reversion at the Star Chamber fell in. During 1612 his cousin, Lord Salisbury, died and preferment was general. True to the system laid down in his private notebooks, Bacon eagerly sought for some advancement, and pressed his claims with the thoroughness befitting a philosopher. For a time, however, he received only promises, but in 1613 he was appointed Attorney-General.

Bacon had now gained the king's ear, and his

prospects certainly seemed brighter than ever before. He continued to offer James advice on all questions of policy, though how so busy a man found time to consider and compose so many closely written pages of carefully thought-out arguments as Bacon offered to his sovereign remains a mystery. His days

AN EXPLORER OF THE FIELDS OF HUMAN INQUIRY



Bacon was not a practical scientist; he did not engage in any experiments or researches. He applied his acute mind to the discovery of the right roads of approach to such investigations.

were full of bustling activity and social obligations, yet he found time to draw up the most careful and elaborate of memoranda on each controversial subject of importance which affected James or his Government.

It is remarkable that Bacon, who was so modern in his philosophic and scientific views, should have been limited in his political vision to the Elizabethan ideal. He considered the

king as the supreme power, as the hub around which the whole life of the nation revolved. He was anxious, beyond all things, that the prerogative of this royal pivot should remain inviolate, and so he conceived that ministers should limit themselves to executing the royal will in as prudent a manner as possible, since they were essentially responsible to the king himself, and not to Parliament.

Such an attitude as Bacon's can, of course, be criticized as patently insincere, when adopted by such a notorious opportunist as himself. He who desires favours from the

THE PHILOSOPHER AS A BOY



Bacon was a delicate child and very precocious. It is said that his childish sharpness of wit amused Queen Elizabeth, who called him her "young lord keeper."

king will naturally adopt a political outlook likely to find approval at Court. But Bacon appears to have believed perfectly sincerely in this theory of politics, and his time serving was a result of his belief, rather than otherwise. To-day it is hard to understand a mind which builds its whole conception of the State upon so frail a foundation as the doctrine of the divine right of kings. But in Bacon's day the majority of his countrymen agreed

with him. The glories of Elizabeth's reign had done much to convince men of the truth of this doctrine, and James had not yet so badly mismanaged affairs as to shake his subjects' belief that he ruled by such a right.

Bacon's next step upwards came in 1616 when he was made a privy councillor, and thus approached a little nearer to the Woolsack. Allying his fortunes with Villiers, James's reigning favourite, he rose in 1618 to the dignity of Lord Chancellor, taking his seat as Baron Verulam. Villiers at the same time was created a marquis.

First Philosopher in the Land

In the year 1620 Bacon was at the height of his fame, and that year also saw the publication of his "Novum Organum," referred to later. He had now risen to the very top of his profession, had triumphed at last over all the forces which for so many years had denied him advancement, and he was, in addition, recognized as the first savant and philosopher in the land. As a fitting crown to his career he was, at the beginning of 1621, created Viscount St. Albans. On the 30th January, 1621, the House of Commons met, and its meeting heralded Bacon's fall.

As Chancellor, Bacon had displayed all his gifts of lucidity, activity, and learning. In spite of the constant intervention of Villiers (now the first duke of Buckingham), who was for ever trying to manipulate the scales in his own or in a friend's or client's favour, Bacon dispensed fair and prompt justice. The House of Commons, however, in which he had first made his mark as a young man, detested him with an almost unwavering unanimity. His professional rival, Coke (the great Coke of British jurisprudence), whom he had outstripped in the race to the Woolsack, was ready to do him any mischief, and Coke had the ear of the House. James's arbitrary government had, moreover, annoyed the members of the Commons to such an extent that they were on the look out for a victim among the royal favourites.

Relations with the King

The relations between the king and Bacon are difficult to understand. In those days the Lord Chancellorship was by far the most important post under the Crown, and Bacon, from James's point of view, was admirably suited to fill it. His was the ablest mind in the country, he was experienced, a brilliant lawyer, a sagacious counsellor, and a whole-hearted adherent to the royal party. Yet, in spite of all this, his influence in affairs was by no means in keeping with his position. The king only followed his advice when it exactly fitted in with his own wishes, nor was

Bacon consulted on many issues at all; he was merely told what James had decided when the issue was cut and dried.

He was, in every sense of the word, a "servant" of the king who, when he was not smoothing down the feathers James had ruffled, used his immense practical abilities to carry out small reforms or promote smaller interests on behalf of one or other of his master's favourites. Invariably he had to do the king's dirty work, and when James committed one of his habitual political *faux pas* Bacon was ever at hand to shoulder the blame and become the king's whipping-boy.

Pleads Guilty to Corruption

Suddenly a charge of bribery was brought against Bacon by some altogether obscure person, another followed, then others in quick succession. Corruptors certainly had offered moneys to Bacon while their cases were still in hearing, he certainly had accepted their gifts—and had usually decided against them. The animosity of the Commons, for this was nothing more than a political charge, rendered resistance quite out of the question, so Bacon admitted twenty-eight particular accusations with the words: "I do plainly and ingenuously confess that I am guilty of corruption, and do renounce all defence." As a matter of fact, as everyone knew, almost every other judge then on the bench also received money presents from litigants, and this shows how Bacon's fall was engineered purely for political purposes. None the less, his fault is plain, and cannot be condoned.

For some while the Lords discussed what should be done with the guilty Lord Chancellor. On the 3rd May, 1621, sentence was promulgated. The sentence was that Bacon should be fined £40,000, an immense sum in those days, that he should be disqualified from sitting in Parliament and from any office, and that he should be imprisoned during the king's pleasure. James's pleasure was short, enduring, in fact, only four days. The king further lightened Bacon's sentence by remitting the payment of the fine, and by granting him a general pardon (which did not, of course, cover the Parliamentary censure) in November, 1621, and allowing him to return to Court.

Retirement to Gorhambury

So fell the Lord Chancellor, who retired in disgrace to Gorhambury, the magnificent country estate he had purchased in Hertfordshire, and upon which he had lavished a great amount of money. There he languished for some years, busy in philosophic and scientific productions, yet always vainly hoping for a return to power. He had been in the game of government for so long that he could not

bear to be out of it. But let us give a little consideration to those intellectual labours that had occupied him most of his life, and that now, in his disgrace, became his only solace.

Whatever faults Bacon may or may not have had, he was undoubtedly gifted with a magnificent intellect. Above all things he

A GREAT AND VENAL LORD CHANCELLOR



Bacon admitted twenty-eight charges with the words: "I do plainly and ingenuously confess that I am guilty of corruption, and do renounce all defence."

was sharp-sighted and intelligent. Conscience, generosity, romance, and sentiment had no part in his make-up at all. But these very faults, which brought him ruin as a man, quickened his abilities in realms that were purely intellectual. Bacon had a great mind, and a petty character. Oddly enough, though he was the first writer of modern English prose, Bacon rather despised English as a medium, holding that "the modern languages will at one time or another play the bankrupt with

books." Accordingly he wrote all his most important works in Latin, and they have all been admirably translated.

Bacon had designed to write an immense treatise embracing the whole realm of science and philosophy, to be called the "Instauratio Magna." This was to have six parts, of which he finished one, his "Novum Organum," and also left behind him portions and completed scraps of most of the others. The substance of Bacon's scientific writings cannot here be examined separately; all that can be attempted is a sketch of his general conceptions and ideas.

Plumbing the Well of Knowledge

His great thesis was that the sovereignty of man over nature could only obtain through knowledge, that knowledge, therefore, was the only desirable thing in the world. His design was to plumb the well of knowledge, discover its secret depths, and thus enable mankind to command nature as desired. At Cambridge he had noticed the total insufficiency of the old science, a relic of mediævalism, which built up its superstructure on various dogmas and hypotheses palpably false in themselves. Therefore, Bacon sought for some new method, by which knowledge could be arranged and co-ordinated, which would form one harmonious theory into which all facts would fit. He was feeling out towards a new experimental method, which he never wholly grasped and which was not to be realized until such men as Boyle, Priestley, Lavoisier, and Cavendish came to revolutionize natural science.

What Bacon did arrive at was what he called the "Inductive Method." Here, alas, doubt creeps in, for though in the "Novum Organum" he half defined what he meant, his exposition remains unfinished and aphoristic in the extreme. Later fragments give indications that something, a very great something, was in his mind, but he never wholly gave his knowledge to the world.

Free and Modern Mind

However, as a result of all his labours, Bacon freed learning from the burden placed upon it by the mediæval schoolmen. His mind was essentially free and modern—not hampered and delayed by a whole mass of preconceived opinions about this, that, and the other. So he was able to open up and ventilate questions which no one had ever thought of discussing merely because St. Thomas Aquinas, or Paracelsus, or Aristotle had already given out some exclusive dogma on the subject.

How wide awake and lively Bacon's mind was can be seen from the first work he undertook after his fall—his "History of Henry VII." This is the first scientific and open-minded history ever written, and from it

modern historical science dates. Henry is treated as a man, not as a king, and his motives, policies, and actions are discussed, and all his faults mercilessly exposed. In some things, Bacon shows a pretty wit. For example, after dwelling on Henry's great avarice and stinginess, he goes on to describe the king's unsuccessful attempt to get Henry VI canonized as a saint. His comment runs: "The general opinion was that Pope Julius was too dear."

Written in Three Months

This history is also a monument to Bacon's industry and gigantic intellect. It is a weighty book, yet he wrote it entirely in three months, and at a time when he was not allowed in London, and, therefore, could not consult any original sources. In spite of this his work is amazingly accurate, and to this day extremely few errors have been detected in it.

Bacon's position as a scientist and philosopher is, perhaps, best explained in Voltaire's words: "The Chancellor Bacon did not yet know Nature, but he knew and pointed out all the roads to her." He did not ever actually come into contact with natural phenomena himself; that is to say, he never engaged in any profound course of experiments or researches. Rather he was busy in applying his acute powers to the discovery of what were the roads of approach to such investigations. He explored the fields of human inquiry with a searching eye, eager to discover in what direction and by what methods advances could be made. In fact, without Bacon's work, the early scientists of the eighteenth century would not have known in what direction to move. He cleared away the undergrowth of a thousand years, and left the ground clear for the huge strides science has taken in the last century and a half.

Working to the Strains of Music

Though Bacon undertook no prolonged researches, his was an actively speculative mind, and he was for ever satisfying himself on one point or another by putting the matter to the test. For example, a friend once told him that music, discreetly played in an adjoining room, promoted the activity of the mind. Bacon immediately sent for a band to come to Gorhambury, and in the evening, as he worked in his study, the musicians played in the next room. After they had done so for a week, he worked without them for another seven days, and compared the results of his labours. He thus discovered that, other things being equal, the music did aid his reflections and composition. So the musicians were recalled, and ever afterwards music outside his study door each evening was the rule at Gorhambury.

Although Bacon left his mark upon the world primarily as a scientific philosopher, a word must also be said of his excursion into the realm of letters, for his "Essays" are among the best known in English literature. The first complete edition of these was published in 1625, after he had spent some of his enforced leisure in polishing up and adding to previous issues. They were the second collection of essays published in Europe, for Bacon borrowed the name from Montaigne, a Frenchman, who may safely be said to have invented this form of writing. The essays themselves are short, very condensed, and epigrammatic strings of remarks on various subjects. In them Bacon's clear, modern, and emancipated mentality is reflected better, perhaps, than in any other of his writings. In fact, he who would find out what manner of man Francis Bacon really was cannot do better than read the essays. Here he will find all the penetration, the analytic power, the condensed wisdom, and the occasional flashes of incredible meanness of spirit which distinguished the great Lord Chancellor.

Bacon's essays, moreover, have given us a number of the best known and wisest phrases in the language. His sudden remarks have all the arresting appeal of a brilliantly composed newspaper headline. He has all the same point, and stab, and finality. "Revenge is a kind of wild justice," "Men fear death as children fear to go in the dark," "What is truth?" said jesting Pilate, and would not stay for an answer," "He that hath wife and children hath given hostages to fortune." These are four opening sentences from four of the essays, and more arresting, or better-known ones, it would be hard to find. Judging him mainly upon these essays,

Hazlitt said that he considered Bacon to be "the wisest of mankind."

During his later years, although he was grievously hampered by lack of means, Bacon continued to live at Gorhambury in exactly the same state as he had been accustomed to before his fall. Multitudes of servants, beautiful gardens, every luxury and magnificence was somehow or another kept up. A friend once suggested that economies would

WHERE FRANCIS BACON WAS A BENCHER



The hall of Gray's Inn. It has a hammer-beam roof, a carved screen, and many interesting portraits. It is recorded that a performance of *The Comedy of Errors* by a "company of base and common fellows" (perhaps including Shakespeare) was given in the hall in December, 1594.

be wise. "No," replied Bacon with indignation, "I will not be shorn of my feathers." In spite of all things he still hoped to return to favour one day; and, indeed, some authorities stoutly maintain that had he lived ten years longer Bacon, under Charles I, would have climbed back once more on to the Woolsack.

Gradually Bacon's health declined, and he was already in a feeble state when James I died in 1625. On the accession of Charles, Bacon received a writ requesting him to attend

the sittings of the House of Lords, thus indicating that Charles had completely overlooked his past offences. A year or so earlier such a summons would have delighted Bacon immensely. But now he knew that his race was nearly run, and that he could never hope for a return to power. So he flung the writ on to his writing table, remarking, "I have done with such vanities."

A year later, when he was on a visit to London, Bacon drove out to Highgate one

killed and drawn. Then, stepping out of his carriage, he stuffed the chicken with snow with his own hands. This exposure to the cold caused him to catch a chill, and he was driven to Lord Arundel's house near by. His chill soon grew to a fever, and after only a few days' suffering Francis Bacon died on the 9th April, 1626.

Bacon lies buried in St. Michael's church, St. Albans, by his mother's side. Soon after his death his secretary, Sir Thomas Meantys, erected a monument to the great philosopher's memory, in which he is represented in a sitting posture.

A Fascinating Figure

In spite of all his failings, and they were not a few, Bacon remains one of the greatest and most fascinating figures in English history. Of course, in a way, his fall from such a high position as that of Lord Chancellor tends to cast a halo of romance—a thing he himself would have detested—around his memory, for a gigantic failure never ceases to capture the interest. But when such fictitious fame is discounted, Bacon remains a huge figure merely by the force and manifold activities of his giant intellect. After all, the things of the intellect are all that he really cared for. This he explains in his "Novum Organum" with the words: "And, therefore, we see that voluptuous men turn pious and ambitious princes turn melancholy. But of knowledge there is no satiety."

Here the real inward man in Bacon speaks, the man who cared for wisdom more than for money, place, honour, even life itself. We may find, perhaps, a certain pathos in the story of his life, but there is no need to mourn for him, since he himself believed the words

he wrote, "The world's a bubble and the life of man less than a span."

[See the various editions of Francis Bacon's works, and Lives by J. Spedding (7 vols., 1862-74), E. A. Abbott (1885), and W. H. Dixon (1862).]

THE AUTHOR OF THE WELL-KNOWN "ESSAYS"



Perhaps the most familiar of Bacon's writings are his "Essays." These deal with everyday practical matters, or, as he says of them, "come home to men's business and bosoms," and are universally admired both for their wisdom and their distinctive style. They were the first written by an Englishman.

frosty spring morning to conduct a small experiment, in order to satisfy his curiosity. He wanted to know whether snow would preserve meat from decay by reason of its coldness. So he bought a chicken, which was

A GIANT of ELIZABETHAN DRAMA

Rare Ben Jonson, the Greatest Intellectual Force in the Elizabethan Theatre, Who by His Powerful Thought and Craftsmanship Guided His Brother Dramatists

IN the summer of 1618, a man long past middle age, of great stature and very corpulent, might have been seen trudging along the road to Scotland. He must have seemed a singular figure to the simple country folk with whom he exchanged greetings, for he combined the gracious manner of a courtier with the uncouth appearance of a tramp.

At that time walking feats were all the rage, and perhaps the eccentric pedestrian was sometimes mistaken for the world-renowned Tom Coryate, whose travels on foot in Europe and Asia had recently set a new fashion. Very few of those who accosted the traveller, except those whom the latter enlightened upon the subject, knew that he was "rare Ben Jonson," the most learned poet of the age.

The motive that impelled Jonson, then so ponderous with flesh and so short of breath, to desert his comfortable bench at the Mermaid Tavern, and to deny himself the daily talk with some of England's choicest wits for nearly a year, has never been clearly established. But it is known that he did, his forty-sixth year, and when weighing nineteen stone twelve pounds, walk to Scotland.

It may be that he merely wished to satisfy his curiosity about the country of his ancestors, who had been landed gentry round about Annandale and Carlisle. A stronger motive, perhaps, would have been the desire to study Scottish manners. A Stuart king was reigning, and Jonson was not above ingratiating himself in the eyes of his sovereign by the composition of verses flattering to the latter's birthplace.

At Leith, Jonson met another poet-pedestrian, Taylor by name, who, in order to advertise his doggerel verse, had vowed to walk to Scotland without a penny in his pocket. He accepted, however, from Jonson, a piece of gold, worth two and twenty shillings, with which to drink the latter's health in England.

When he visited Edinburgh, Jonson was received with magnificent honours, for the great fame of his intellectual powers had gone before him. He was invested with the freedom of the city and fêted on all sides. The city fathers subscribed £200—a very large sum in those days—in order to provide a great banquet worthy of the visit to their city of the celebrated poet-traveller.

Sated, after a while, with so much dining and wining, Jonson presently retired to Hawthornden, where he spent a quiet time at the house of William Drummond, a minor poet, who, fully realizing the greatness and deserved reputation of his guest, carefully recorded his conversation.

Jonson talked freely about himself and his contemporaries. He discussed the art of poetry, and deplored the folly of those who practised it as a profession when they might achieve wealth as "merchants, physicians, or lawyers"; he was himself, he declared, "better versed, and knew more, in Greek and Latin than all the poets in England, and quintessence their brains"; he opined that Shakespeare wanted art, although "I loved the man, and do honour his memory, on this side idolatry, as much as any," and that "Francis Beaumont loved too much himself and his own verses."

To Drummond we are indebted for many details concerning Jonson's career. He was born, probably at Westminster, in the early part of 1573, a month after the death of his father who, after having been deprived of his estates and thrown into prison during the reign of Queen Mary, ended his life as a minister.

Jonson's mother, who was a woman of great vigour and staunch in her affection for her son, married again. The poet's stepfather was a master bricklayer, and he taught Jonson this trade, which the latter began to practise directly after leaving Westminster School.

The pursuit of this humble calling, however,

THE MOST LEARNED POET OF HIS AGE



Deeply learned, yet never pedantic, Ben Jonson formed the link between the lighter side of the Renaissance and its more important and serious aspect.

by no means implied that Jonson's education had been scamped. Thanks to the interest of William Camden, a master at Westminster School, the future dramatist received as good an education as was possible in those days for a boy whose circumstances did not permit of a university career. He knew Latin and Greek and could make verses. Under Camden's guidance he had laid the foundations for that solid scholarship which made him in after years so respected and looked up to even by those few individuals who were his peers in the arts of poetry and drama.

Changes the Hod for the Sword

There is a tale told of Jonson's discovery by a rich nobleman whose interest was aroused by the unusual sight of a young labourer carrying a hod of bricks on his shoulder while, in his free hand, he held a volume of Tacitus. Whether this is true or not, Jonson did not wait to be rescued from his uncongenial occupation. Being adventurous and of powerful build, he joined the army and went to the wars. In those days a young man of spirit who could not afford to do "the grand tour" abroad, could always satisfy his curiosity and gain experience by taking part in one of the little wars generally being waged in foreign lands.

Jonson went to the Low Countries and acquitted himself well. We are told that he at least once engaged in single combat, killed his man and stripped him of his armour, "taking *spolia opima* from him in face of both camps."

That the scholar-soldier was back in London before the end of his nineteenth year is certain, for he was married within the City in 1592. He resumed his studies, and at the same time found a more pleasant form of livelihood as an actor under Philip Henslowe's management at the Rose Theatre, Southwark.

An Opinion of His Acting

From that time until 1597, Jonson's name appears regularly on the salary lists of the Lord Admiral's company of players. Aubrey, the chronicler, says of him that "he was never a good actor, but an excellent instructor." He was also employed by Henslowe to rewrite old plays, and in this way served a full apprenticeship to the drama.

Jonson was not drawn towards the stage by that irresistible compulsion which led Marlowe, Shakespeare, and many other brilliant young men of the age, to concentrate all their gifts upon mastering the art of dramatic representation. The new-comer was a poet, first and foremost, and then a scholar.

He looked upon the stage as the most popular form of art at the time, and he knew that in order to achieve eminence he must write plays. But that knowledge did not blind him to the

manifold defects of the Elizabethan drama. Unaffected by the romantic glamour that surrounded the young dramatist, and seeing through the fustian of the stage, he approached his task with a cool head, determined to sacrifice as little as possible to the demands of the clamouring mob.

Seeing Elizabethan drama from a distance, as we do to-day, and studying only those plays that have survived the test of time, we are apt to forget that the majority of the plays performed were exceedingly crude, both in conception and execution. Jonson was a keen critic of the stage before he attempted to write plays. Both as a scholar and as a judge of drama he towered head and shoulders above the rank and file, and even as a young man there were few who could match him in knowledge of what could be done to lift the Elizabethan stage out of the rut of melodrama into the refined atmosphere of pure comedy.

An Affair of Honour

Before his first original play was performed, Jonson lost all his worldly goods, and very nearly lost his life, over an affair of honour. He quarrelled with a fellow-actor named Gabriel Spencer. Nothing is known of the cause of the disagreement, but it must have been serious, for a duel was fought in Hogsden Fields, and Jonson mortally wounded his antagonist. He was arrested and tried for his life, but "pleaded the clergy," and escaped with the forfeiture of his goods and chattels and a term of imprisonment. He was also, according to the custom then prevailing, branded on the left thumb with the "Tyburn T."

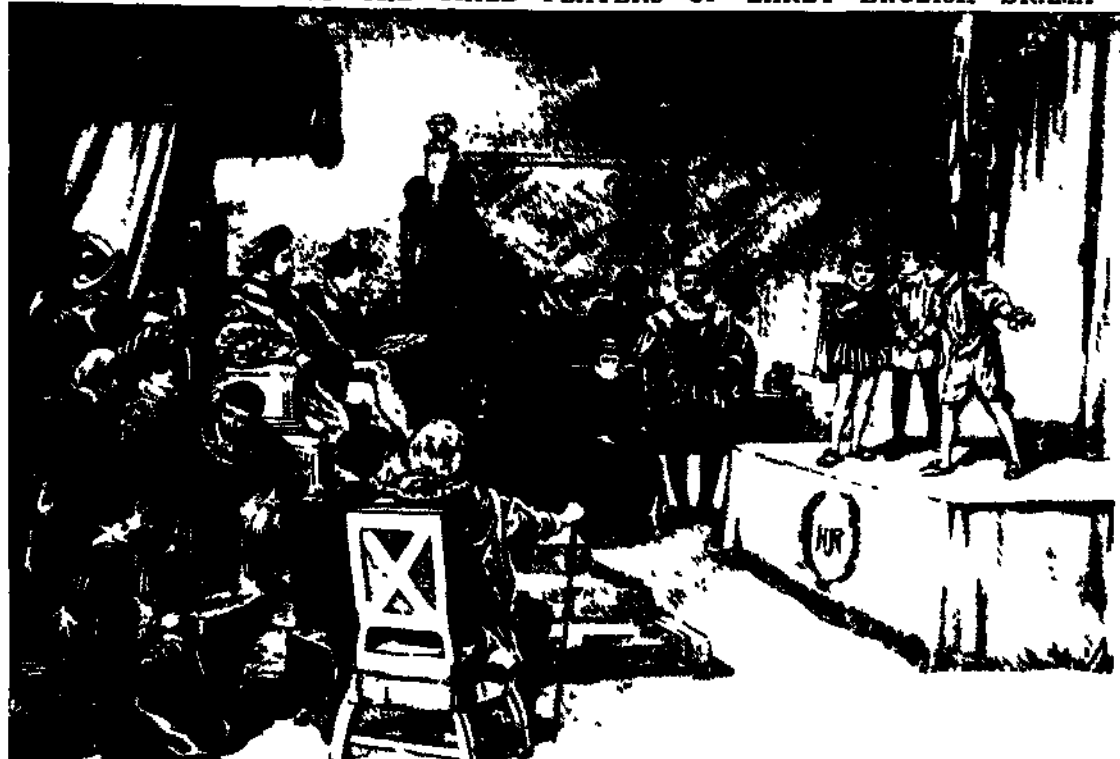
It was Shakespeare, then in the tide of growing prosperity and fame, who persuaded the Lord Chamberlain's company to purchase Jonson's first play, *Every Man in his Humour*, written in 1597. Henslowe had refused it for the rival company on account of Jonson's duel. He soon regretted his squeamishness, for the play was an instant success, and the production placed Jonson immediately in the front rank among his contemporaries.

New Note in Elizabethan Comedy

Every Man in his Humour struck a new note in Elizabethan comedy. Its central idea, that in every man there is one dominating quality which overrides all others and leads the individual in question always to act in one way, was really almost too subtle for the audiences of the time, used to more obvious forms of comedy; but the wit, satire, and poetry of the play, and its brilliant characterization, assured its success even with the "groundlings."

Jonson frequently collaborated with such well-known dramatists as Dekker, Marston, and Chettle, but he quarrelled with most of his

A PERFORMANCE BY THE CHILD PLAYERS OF EARLY ENGLISH DRAMA



From the very early days of the English drama performances were given by children. Ben Jonson's *Cynthia's Revels* was played before Queen Elizabeth by the Children of the Queen's Chapel. Here you see the Children of the Chapel playing before Henry VIII. The king rewarded them with sums of money, the payments being entered in the "Kynges Booke of Payments."

associates and took revenge upon them by pillorying them in plays of his own. As early as 1598, in a play called *The Case is Altered*, acted by children at the Queen's Revels, Jonson earned a reputation as a deadly lampoonist, the play in question being a malicious satire on the works of Anthony Munday, a popular pageant poet of the time. In *The Poetaster* (1601), Jonson mercilessly satirized his former colleagues, Marston and Dekker.

His Earnings as Playwright

Every Man out of his Humour (1599) and *Cynthia's Revels* (1600) were played before Queen Elizabeth, who greatly admired them. Thus was Jonson's reputation assured at the Court, but he was still a poor man. In after years he was wont to complain that he never made more than £200 as a playwright. Jonson, in fact, never became a popular playwright. He was too learned. Many of his quips and quotations went over the heads of the audience, and he did not conceal his hearty contempt for ignorance.

He was obliged to seek patrons among the rich and cultivated. In 1602 he left his wife, who, in his own words, was "a shrew, but honest," and went to live in the house of

Aurelian Townshend, at one time steward to the first Earl of Salisbury, where, for five years, he "scorned the world." He did not, however, neglect his family, for he was devoted to his children.

When James I came to the throne in 1603, Jonson was well placed for favour. Through the instrumentality of his patron he was invited to write the masque to be given in honour of the new king's accession. During the next few years, and in spite of frequent set-backs due to his outspoken utterance and contempt of public opinion, Jonson steadily grew in fame.

Entertaining the King

Sejanus (1603), one of two tragedies that the poet wrote in despair of amusing the public ("since the Comic Muse hath proved so ominous to me"), was badly received by the general playgoer, but applauded at Court. In conjunction with Inigo Jones, Jonson devised entertainments for the king, who loved amusement, but the arrangement did not last very long. Jonson quarrelled with the architect, whose personality he attacked so violently in a comedy, *A Tale of a Tub* (1633), that when the play was performed the Lord Chamberlain ordered the offending part to be deleted.

In 1604 Jonson was again in prison, this time for his share in writing *Eastward Ho*, a comedy mainly by Marston and Chapman, which contained insulting references to the Scots people, and caused offence to James I. As Jonson had helped to write the play, he chivalrously came forward and took his trial with the others who were implicated.

So seriously was the offence regarded that the prisoners were at first ordered to have their noses and ears cut; but the influence of powerful friends averted this catastrophe.

Tragedy that was Averted

Jonson's mother afterwards told him that she had arranged to put poison into the drink sent to him in prison rather than that he should undergo torture and humiliation, adding that she intended at the same time to take poison herself. Fortunately, the poets got off with a light term of imprisonment.

A year later—1605—Jonson was suspected of being implicated in the Gunpowder Plot, and was only cleared by the influence and energy of Lord Salisbury. This was the poet's last brush with the forces of authority. With advancing years he learned wisdom. Henceforth, if he did not actually curry favour at Court, he refrained from openly assisting the enemies of the Crown. More than any other of his great compeers he had inveighed against corruption and injustice, and the dragon's teeth he had sown cost him dear.

Another circumstance that gilded the bitter pill of failure for Jonson was the fact that his great qualities of intellect enabled him to lord it over his more successful rivals in the sphere of playwriting. At the Mermaid Tavern, where the poets of the age met on equal ground, "rare Ben" was an acknowledged leader.

His Superior Knowledge

Jonson's superior knowledge, his sound judgment, and his telling, if somewhat laboured wit, attracted the cultured and excluded the vulgar from these meetings, which otherwise might too often have degenerated into mere occasions for intemperance and wild talk. If Jonson's poetry often savoured of the midnight—for he worked very slowly, laboriously transposing prose into verse, as his first master, Camden, had taught him—his talk had no taint of artificiality about it, and his weighty utterances, expressed in sonorous periods, sobered the light heads and taxed the brains of the most thoughtful.

Fuller has thus compared Jonson's manner with that of the only other great figure of the age who could match and sometimes outmanoeuvre him.

"Many were the wit-combats between Shakespeare and Ben Jonson. I behold them like a Spanish great galleon and an English man-of-

war. Master Jonson, like the former, was built far higher in learning, solid but slow in his performances; Shakespeare, like the latter, lesser in bulk, but lighter in sailing, could turn with all tides, tack about, and take advantage of all winds by the quickness of his wit and invention."

The first ten years of James I's reign were the most prolific in Jonson's career as a dramatic author. During these years of patronage and Court favour he wrote his masterpiece, *Volpone, or the Fox* (1605), a bitter and tremendously effective satire on the vice of avarice; *Epicure, or the Silent Woman* (1609), a comedy of subtle intrigue and searching humour which almost anticipates the productions of Molière; the *Alchemist* (1610), illustrating the comedy of imposture, and *Bartholomew Fair* (1614), a farce conceived in the best Elizabethan manner of rollicking fun and exuberant wit.

Primarily a Poet

He wrote much else besides, but a good deal of his lesser work bears signs of the forced toil of composition and a growing distaste for the business of professional playwriting. Had Jonson lived in the age of newspapers, he would undoubtedly have deserted the stage in disgust and turned to high-class journalism. He was primarily a poet, secondarily a man of ideas needing freedom of expression. The stage, although he mastered its technique, cramped his intellect.

The most bookish of his contemporaries, to whom a well-stored library and time for study were necessities, Jonson was obliged to travel about in search of patronage. Now he is in France, looking after the dissolute son of Sir Walter Raleigh, a worthless cub who tricks his mentor into insobriety and public disgrace; now he is living in retirement, under the protection of the Countess of Rutland, or her cousin, Lady Wroth. Nothing goes well with him for long, and he never, like Shakespeare, becomes a shareholder in a theatre, or is able to look forward to retirement.

Accepts the Laureateship

In 1616 Jonson was granted the inadequate pension of 100 marks a year. Five years later the amount was raised to £200. The poet, possibly piqued by having so often had to draw attention to his wants, refused a knighthood. He accepted, however, the title of Poet Laureate.

It was about this time that a terrible calamity befell Jonson. His library, which was considered to be the richest in England, was completely destroyed by fire. Not only were many priceless volumes burned, but many of Jonson's unpublished manuscripts, including an account of his walking tour to Scotland.

HOW A THEATRE LOOKED IN BEN JONSON'S DAY



Most of the theatres of the time were built in imitation of an inn courtyard. The stage of the Globe Theatre had a thatched roof, and behind was a recess with a balcony. On each side was a door for the actors. Over the doors were windows, which were used either for the purposes of the play or occupied by musicians or spectators. The two masked figures, smoking pipes, that can be seen in the foreground, are ladies of fashion.

For biographies not included in the Groups see Detailed Index

Jonson bore his great loss with stoicism, observing, in a semi-humorous invocation to Vulcan, the god of Fire :

Had I wrote treason here, or heresy,
Imposture, witchcraft, charms or blasphemy,
I had deserved then thy consuming looks—
Perhaps to have been burned with my books.

With the accession of Charles I in 1625, Jonson's affairs improved a little, but the failure of *The Staple of News*, a satire on contemporary journalism, depressed him, and for some while he stubbornly refused to write for the stage. *The New Inn* (1629) was badly acted, and gave

SCHOLAR AND JUDGE OF DRAMA



Jonson was a keen critic of the stage before he attempted to write plays. Both as a scholar and a judge of drama he towered above the rank and file.

rise to a widespread impression that nothing more was to be expected from the then fast-ageing dramatist.

In 1628 he had been given a post as city chronologer, at a salary of 100 nobles a year, but he apparently regarded his appointment in the light of a sinecure, for three years later his salary was suspended until such time as he could show that he had earned it. His last play, *The Magnetic Lady* (1632), acted by the king's men, failed to retrieve his fortunes. He was obliged to write to his friend the Duke of Newcastle in the following terms :

I send no borrowing epistle to provoke your lordship, for I have neither fortune to repay, nor security to engage that will be taken, but I make a most humble petition to your lordship's bounty to succour my present necessities this good time of Easter and it shall conclude all begging requests hereafter on behalf of your truest beadman and most thankful servant, B.J.

At the request of Charles I, the poet's salary as city chronologer was again paid to him, and

not too careful an inquiry was made in respect to the performance of the duties. Jonson, in fact, was soon past labours of any kind. An accumulation of long-neglected diseases overwhelmed him, and he died, poor and bedridden, on the 6th August, 1637.

He left behind him an unfinished poem, "The Sad Shepherd," of such magical beauty and freshness that it is now generally believed to have been the work of his youth.

Fragments of His Conversation

Thanks to Drummond, we are rich in gems of Jonson's talk : "Marston wrote his father-in-law's preachings, and his father-in-law his comedies," "Shakespeare, in a play, brought in a number of men saying they had suffered shipwreck in Bohemia, where is no sea by some 100 miles." Speaking of himself the poet said : "Of all styles he loved most to be named Honest, and hath of that one hundred letters so naming him." He told Drummond that he was "too good and simple, and that oft a man's modesty made a fool of his wit."

He declared that at times "he hath consumed a whole night in lying looking to his great toe, about which he hath seen Tatars and Turks, Romans and Carthaginians, fight in his imagination." The night before his child died of the plague in London, Jonson, who was then staying in the country, and did not know his child was ill, had a dream, in which the latter "appeared to him, of a manly shape, and of that growth that he thinks he shall be at the Resurrection."

Drummond's Interesting Description

Drummond's opinion of Jonson, based upon the latter's conversation during their short meeting, was as follows :

He is a great lover and praiser of himself ; a contentener and scorner of others ; given rather to lose a friend than a jest ; jealous of every word and action of those about him (especially after drink, which is one of the elements in which he liveth) ; a dissembler of ill-parts which reign in him, a bragger of some good that he wanteth ; thinketh nothing well but what either he himself, or some of his friends and countrymen hath said or done ; he is passionately kind and angry ; careless either to gain or keep ; vindictive, but, if he be well answered, at himself.

According to Drummond's estimate, also, Jonson was "oppressed with phantasy, which has ever mastered his reason, a general disease in many poets." But he was undoubtedly the greatest intellectual force in the Elizabethan theatre. Although he failed to hit the popular mark himself, except on rare occasions, he guided others, both by his example as a thinker and by brilliant workmanship, and he, more than any of his contemporaries, understood the significance of the Renaissance period.

[See the various editions of his works, "Ben Jonson," by J. A. Symonds (1886), and "A Study of Jonson," by A. C. Swinburne (1889).]

The FATHER of GARDEN CITIES

How Ebenezer Howard, Perceiving the Housing Evils of City Life, Took Thought, and, Instead of Altering Old Cities, Built New Ones in the Country

EBENEZER HOWARD (the first man in England to make the creation of garden cities a practicable business proposition) was born in the City of London on the 29th January, 1850. His father, a native of Harwich, had come to London as a young man and established himself there as a baker and confectioner. Ebenezer's mother was a Lincolnshire woman.

The future founder of the First Garden City, after being educated at Sudbury, Cheshunt, and Ipswich, started his business career as a junior clerk in a London stockbroker's office, where his salary consisted only of a glass of wine, solemnly presented to him by the head of the firm at lunch time. He was afterwards employed as a clerk in a merchant's office in Jewin Street, where he remained three years.

It was while in this office that young Howard taught himself Pitman's shorthand. This task he mastered in a very short time, and afterwards became one of the fastest and most accurate shorthand writers in the country.

Having acquired working knowledge of the "winged art," he, like Charles Dickens, made use of it to improve his position, and obtained a situation as a correspondence clerk in a solicitor's office. In those days there were, of course, no typewriters, and Howard had to transcribe his notes in longhand.

On Sundays, young Howard used to go to Poultry Chapel with his father. The great Dr. Joseph Parker came to that chapel to be the minister some few years before the City Temple, which he afterwards made famous, was built. At one service, the youthful shorthand writer took a verbatim note of Dr. Parker's

sermon, and sent a transcript to the preacher, saying that he would be glad to do this once every Sunday, free of charge.

The minister asked him to call, and when the lad entered the great preacher's dining-room the latter said, in his deep, strong voice:

"Mr. Howard, I see you have reported my sermon, but you have not reported my prayer!"

Now it had so happened that the shorthand writer, in transcribing his notes, had written the word "history." When he came to read over his transcript, he saw, from the context, that the word should have been transcribed in the plural. So, in his hurry, without thinking, Howard had simply added an "s," making the word "histories." Dr. Parker pounced upon this obvious slip, and was giving the poor shorthand writer a bad time, when Mrs. Parker interposed and took the lad's part. The upshot of this interview was that the preacher there and then engaged young Howard as his private secretary.

When he was about twenty-two years of age Howard went to the United States, arriving in

Chicago about a year after that great city had been laid in ruins by the historic fire of October, 1871. There he undertook the duties of a court stenographer, carrying them out with the utmost satisfaction.

Some time after returning to England, having spent four years in the United States, he took a test, writing 240 words a minute for five minutes. This was reported in "Pitman's Journal" as something in the nature of a record at that time.

Shortly after his return to London, Howard was taken on the staff of the famous firm of Gurney's parliamentary shorthand writers. He

AT THE AGE OF SIXTEEN



The founder of the first garden city began his business career in a London stockbroker's office, where his salary consisted of a glass of wine daily at lunch time.

was the first Pitman's man they had ever had on their regular staff. Afterwards he went into partnership with William Treadwell, who carried on business as a court reporter in Devereux Court, Temple. Howard still frequently worked for Gurney's as an outside reporter. Later, he started in business in the courts on his own account, and became official shorthand writer for the London County Council, the Bankers' Institute, and other bodies. This experience was invaluable in the mental development of a man, who, like Howard, thought deeply on social problems. Howard once said to the writer, "I never should have touched the Garden City movement but for the fact that with me this reform was a religion."

For many years Ebenezer Howard had felt that bad housing was at the root of a great many of the evils of modern city life. He had read much on the subject, and knew many social reformers of all shades of political opinion. Personally, he had become profoundly dissatisfied with the conditions in which so many industrial workers and their families were living in the great cities, and, after a long study of the subject, had come to the conclusion that the remedy should be attempted, first, on bold experimental lines. He felt that the old cities could not easily be altered, and determined, therefore, to build an entirely new city, which was to be planned and laid down on paper, before a single house was built or a road cut.

An Opinion Confirmed

As illustrating the process which confirmed Mr. Howard in the conclusion that factories could in many cases wisely be moved out of London and set up in a new town, a simple incident may be mentioned. On one occasion he was taking a shorthand note of an arbitration case. A railway company was proposing to take certain manufacturing premises in a suburb of London, and the question arose as to what damages the company should pay to the dispossessed factory owner. One of the leading counsel for the railway company asked the

manufacturer where his raw material came from. He replied that it came from the north of England. "Then," said the counsel, "why not remove your factory to the north of England, where you would be close to the source of your raw material?"

Towards the end of 1898, Ebenezer Howard published at his own expense a book entitled "To-Morrow"—afterwards republished under the title of "Garden Cities of To-Morrow"—in which he propounded his scheme for the building of a garden city, as a new experiment in housing and industrial organization.

HOWARD IN EARLY MANHOOD



Howard was a brilliant stenographer, and his experiences as shorthand writer to the London County Council and other bodies brought him into touch with the housing question.

Howard was much encouraged, when writing that book, to find that Professor Alfred Marshall, whom he had the pleasure of meeting when taking the official notes of the Labour Commission, had urged the necessity for the decentralization of London, and in the course of an article, in the *Contemporary Review* in 1884, on "The Housing of the London Poor," had said:—

Whatever reforms he introduced into the dwellings of the London poor, it will still remain true that the whole area of London is insufficient to supply its population with fresh air, and the free space that is wanted for wholesome recreation. A remedy for the overcrowding of London will still be wanted. . . . There are large classes of the population of London whose removal into the country would be, in the long run, economically advantageous; it would benefit alike those who moved and those who remained behind.

Stated briefly, as Sir Theodore Chambers, K.B.E., Chairman of the Welwyn Garden City Company, has written in his foreword to one of the later editions of "Garden Cities of To-Morrow," the garden city policy "consists in the building of new, independent, self-contained industrial towns of reasonable dimensions, in suitable situations, on areas of low-priced land, in contradistinction to the continuous adding of factories and dwelling-houses to the large existing cities."

There is an immense difference between Howard's garden city movement and the garden suburbs, which are simply pleasant residential districts for people who work elsewhere. There

THE FAMOUS GARDEN CITY IN THE HEART OF HERTFORDSHIRE



In 1903 the First Garden City Co., Ltd., was formed, and an agricultural estate of 3,700 acres was purchased in Hertfordshire, about thirty-five miles from London. Here the Letchworth Garden City was founded. To-day Letchworth is not only an object-lesson in town planning and civic organization, but it is one of the most beautiful industrial towns in England.

is still a great confusion of ideas regarding garden cities and garden suburbs, and one constantly sees references, even in the Press, which suggest that the two terms are synonymous, whereas they are fundamentally different as regards their purpose and development.

When people are planning a thing that is in their mind and trying to reduce it to paper, they often say: "Let's get a clean sheet to work on!" That was what Howard did when he was reducing his ideas to concrete terms. His first conception was to build a new town on a rural site of 6,000 acres, with the town in the centre, and to have all the industries and the agricultural belt worked by one powerful organization in the interests of the community. This idea of "integral co-operation" was to animate what was to be a large and comprehensive scheme of what might be termed "municipal socialism."

Solution of a Difficulty

One afternoon, Howard, thinking over this plan, realized what an extremely difficult thing it would be to manage the large agricultural belt as one enterprise. Then, like a flash, came the solution: "Do not do this; let your land to different tenants, and secure the increment value for the community." A few moments' further pondering, and then the supplementary idea flashed in his mind: "Do the same with the industries. Combine in one great experiment a wise social purpose with large scope for private enterprise." He immediately worked out his ideas on these very simple lines, and, in his book,

laid out a diagram—not a plan—of a "Garden City"—the city occupying 1,000 acres, the permanent agricultural belt around it occupying 5,000 acres, and the maximum population totalling 32,000.

However successful his scheme might become, he had no intention of allowing his city to grow to undue proportions. His intention was that, when the First Garden City had grown to nearly its full size, another garden city should be established elsewhere. As a matter of fact, this is exactly what happened. When Letchworth (First Garden City) was well established, Welwyn Garden City was started. These are at present the only garden cities in Great Britain.

When Howard published his book it met with very favourable notice. It is, however, one thing to get people interested in an idea, and quite another to induce them to risk their time, reputation, and money in a new experiment. Howard was obliged to continue his professional duties, but he devoted all his spare time to missionary propaganda on behalf of garden cities.

Garden City Association Formed

He gave lectures on the subject in London, Glasgow, Manchester, Dundee, and other cities, and, in 1899, a few friends having come to his support, he formed the Garden City Association, with honorary officers, and a membership fee of one shilling. For two years the association carried on a great deal of propaganda, but funds were difficult to obtain, and during the whole of

that period the association's income from subscriptions amounted to only £241 13s. 9d.

It was not until 1901, when George Cadbury, at the suggestion of the first secretary of the Garden City Association, arranged for a conference on garden cities and town planning, at the beautiful garden village of Bournville, that the movement really became widely known and supported. This conference was attended by no less than 1,500 delegates from all parts of the country, including mayors, town clerks, municipal engineers, and other people who were interested in the movement

A GREAT SOCIAL BENEFACTOR



Howard thought deeply on social problems. "I never should have touched the garden city movement," he said, "but for the fact that with me this reform was a religion."

In 1903 the First Garden City Co., Ltd., was formed, and an agricultural estate of 3,700 acres, was purchased in Hertfordshire, about thirty-five miles from London—its first chairman being Ralph Neville, afterwards a judge of the High Courts. Here the Letchworth Garden City was founded, and, notwithstanding many difficulties, due chiefly to insufficient capital, the experiment was carried out successfully. To-day Letchworth is not only an object-lesson in town planning and civic organization quite unique in the world, it is also

one of the most beautiful industrial towns in Great Britain.

Howard was naturally one of the first residents in Letchworth Garden City, and a very active force in its development, until Welwyn Garden City was started, when he took up his residence there. In the centre of Letchworth there is a public park called "Howard Park," and close by is the Mrs. Howard Memorial Hall, in memory of Ebenezer Howard's wife, who died in 1904. She had worked untiringly in the early days of the Garden City Association.

Help of the Cinematograph

Soon after the World War Sir Oswald Stoll lent the Alhambra Theatre, free of charge, to the Garden Cities and Town Planning Association for the purpose of an afternoon exhibition of cinematograph films relating to the garden city movement. Howard was asked to see if it was possible for either the king or the queen to be present. He, therefore, wrote to Lord Stamfordham at Windsor, and decided to deliver the letter in person.

Lord Stamfordham said it would be quite impossible for either of their Majesties to attend, as they had too many engagements. Then, carrying on the conversation, Lord Stamfordham said: "I am rather disappointed with the garden cities and garden suburbs movement. It seems to me you build very nice houses, in pleasant surroundings, for the well-to-do, but little is done to provide better houses for artisans and labourers."

Howard had encountered this criticism before, and knew that it arose largely because of the way people confused garden cities and garden suburbs. He told Lord Stamfordham that there were between thirty and forty factories in Letchworth Garden City, and that hundreds of garden city cottages, with three bedrooms, had, prior to the war, been let at rents ranging from five shillings to twelve shillings a week, including rates, to the working section of the population of the town.

Interest of the Prince of Wales

This was something of an eye-opener for Lord Stamfordham, and he at once said that perhaps the Prince of Wales would attend the meeting, and that he would himself move in the matter. The Prince of Wales did attend, and Howard sat in the box with him and explained the cinematograph pictures. Howard mentioned to the prince that he was in negotiation with the Marquess of Salisbury about the acquisition from him of some land eminently suited to be part of a second garden city. That land was ultimately acquired, and now forms part of the Welwyn Garden City.

[See "Garden Cities of To-Morrow," by Ebenezer Howard (1902).]



BUILDER of MAMMOTH AERIAL LINERS

Count Zeppelin, Who, Triumphant over All Difficulties, Succeeded in Constructing a Rigid Airship that Has Become the Type of Well-nigh All that Followed

ABOUT the year 1890 a German cavalry leader retired from a long and distinguished service and announced that he intended to devote the remainder of his life, and what means he had, to the study of aeronautics and the building of airships.

I intend (he said) to build a vessel which will be able to travel to places that cannot be approached—or only

with great difficulty—by other means of transport, to undiscovered coasts or interiors, in a straight line across land and water where ships are to be sought for; from one fleet station or army to another, carrying persons and dispatches; for observations of the movements of hostile fleets or armies, not for active participation in warfare. My balloon must be able to travel several days without renewing provisions, fuel, or gas. It must travel quickly enough to reach a certain goal in a given number of days, and must possess sufficient rigidity and non-inflammability to ascend, travel, and descend under ordinary conditions.

Such was Count Zeppelin's vision, which accurately prefigured his actual accomplishment, save in respect to the proviso that the airship was "not for active participation in warfare."

People were inclined to smile at the idea of the veteran army officer turning inventor. He was known as a practical man, but he had done nothing to suggest that he was likely to solve a problem which had baffled many men who had received a more thorough-going scientific training. Zeppelin, however, had a scientific imagination, and plenty of courage and determination.

He was not alone among pioneers who had left their professions in order to study aerial navigation. Renard and Krebs, the inventors of a dirigible which made several successful flights in 1884, were army officers. Another aeronaut, E. S. Robertson, was formerly a conjurer. An American physician, Dr. J. Jeffries, was one of the first to cross the English Channel in a balloon. A Parisian photographer, A. Nadar,

constructed in 1863 what was then the largest balloon. The Montgolfiers were paper-makers. The Lebaudy brothers were sugar-refiners.

Most of the very early speculators upon the problem of man's ultimate mastery of the air were monks and friars. This is not surprising, since they were naturally thoughtful men, and had plenty of leisure in which to indulge themselves in flights of imagination and to apply common sense and what scientific knowledge was available in their day to the dream of conquering the air.

Thus Roger Bacon observed the floating clouds, and deduced from their movement a theory that the air was really like another sea, and that if vessels of the right kind could be made to sail upon so treacherous an element, it would be very greatly to man's advantage. His conception of a problematical airship as "a large hollow globe of copper or other suitable metal, wrought extremely thin, and filled with liquid fire," although rather picturesque than scientific, shows that the learned friar had more than a rudimentary idea of the essentials of aeronautics.

In 1508 Abbot Damian made a pair of wings out of the feathers of birds and attempted to fly from Scotland to France. He was picked up at a very early stage in his bold journey, with a broken leg. The cause of his failure, he declared, was that he ought to have used eagle's feathers.

Perhaps, if man had not sometimes allowed his imagination to run away with his reason, flying would never have become an accomplished fact. In the middle ages, when alchemy, sorcery, and demonology occupied the places in men's minds that are now filled with relatively accurate knowledge, all sorts of fantastic designs for airships were made, based upon the

A VERY EFFICIENT AIRSHIP



The Zeppelin, *Hansa*, greeting the German liner, *Imperator*, on her return from America. The *Hansa*, *Victoria Luise*, and *Sachsen* between them flew 110,000 miles without mishap.

For biographies not included in the Groups see detailed index



grotesque fancies of the age. There were air-serpents and flying dragons. Fire and smoke belched from the mouth of these rudimentary balloons, and the parachutes, clinging to which monks made daring flights, were highly decorated with symbolical emblems.

But there was much common sense about some of these designs of the Middle Ages. In particular, the working drawings of Leonardo da Vinci marvellously foreshadowed the science of aeronautics as applied to the aeroplane.

Accounts of numerous other flying experiments have been given elsewhere. It is the

COUNT FERDINAND VON ZEPPELIN



It is a remarkable fact that the inventor's first airship comprised practically all the elements that have made Zeppelin airships the most successful for long flight and rigidity.

evolution of the rigid dirigible which is of particular interest in connexion with the accomplishment of Count Zeppelin.

Count Ferdinand Zeppelin was born at Manzell, near Friedrichshafen, on the 8th July, 1838. He was, therefore, over fifty years of age when he began the work of building airships.

He joined the army as a young man and in times of peace. Anxious for military glory, he went to America and fought on the side of the Confederates in the Civil War. During this campaign he learned the value of the balloon in warfare. He made several ascents and was able to do important reconnaissance work.

Returning to Germany in time for the Franco-

Prussian War of 1870, Zeppelin quickly distinguished himself as a dashing cavalry leader. He was one of the first two Prussian soldiers to set foot on French soil. As much for gallantry as efficiency in leadership he earned the rank of a general.

For many years he passed an uneventful life, and when he came to the age of retirement it was only the astonishing announcement of his aims that made the event in any way more interesting than the retirement of hundreds of other army officers.

Appearances are Deceptive

Zeppelin did not look the part he had chosen to play. It did not seem to those who knew him that this stoutish old gentleman with the bluff, genial manner and twinkling eyes could be harbouring revolutionary ideas about aerial navigation. He had always been rather a soldier than a student. Now he proposed to bury himself in a workshop on Lake Constance and pore over papers and abstruse works on aeronautics.

Unable at first to find financial support for his schemes, Zeppelin sold his family estates and everything of value that he possessed, in order to raise the sum of £30,000 for his first experiment. Knowing that the result, however problematical in many respects, would certainly be a frail vessel liable to destruction by landings on terra firma, he decided, at the outset, to build his first airship on the water.

He, therefore, began operations by building a dock on Lake Constance. This building, in itself a unique feat of engineering, was 450 feet long, 78 feet broad, and 66 feet high. It rested upon 95 pontoons, and could be steered in any direction upon the lake, thus making it possible for the airship which it was to house to be launched from the most favourable spot in regard to the direction of the wind.

What His Foresight Proved

Such foresight shows how completely Zeppelin had worked out his plans on paper and in his head, before beginning to build a monster vessel which the least mishap in handling would doom to destruction before its airworthiness could be proved.

Zeppelin's immediate predecessor, an Austrian named Schwarz, had been the first to realize the disadvantages of the ordinary limp balloon. He constructed an envelope with a rigid aluminium framework, but he was not able to make a workable success of it. Nevertheless, his attempt gave Zeppelin food for thought. It was, in fact, the wreck of the Schwarz rigid airship that finally decided the ex-cavalry leader to devote his energies to aeronautics.

Although strongly influenced by Schwarz, Zeppelin by no means limited himself to the



WATCHING A ZEPPELIN FLYING OVER LAKE CONSTANCE



Knowing that the result of his experiments, however problematical in many respects, would certainly be a frail vessel liable to destruction by landings on terra firma, Count Zeppelin decided at the outset to build his airships on water. He, therefore, erected a floating dock on Lake Constance, and here his airships were constructed and launched.

former's general ideas of rigidity and dirigibility. The germ of his conception was derived from the conviction that an airship must present a uniformly taut surface to the element which is to support it, and he was much helped in his researches by studying Fulton's designs for the submarine. Thus he evolved the characteristic cigar shape of the Zeppelin which has scarcely been modified since the building of the first model.

Power from Daimler Engines

The problem of power had already been solved, thanks to the genius of Gottlieb Daimler, the German mechanic, whose light oil engine, mounted on a tricycle, had a generation before aroused amusement, but without which no serious attempt at aerial navigation for long distances would have been possible. Zeppelin had at one time lived close to the Daimler works at Stuttgart, and he knew that the Daimler engine was the best for his purpose.

Within two years Zeppelin No. 1 was ready for flight. Perhaps the most remarkable circumstance in connexion with its inventor's activities is that this vessel, the first fruit of his labours, comprised practically all the elements

which have made Zeppelin airships the most successful for long flight and rigidity. Subsequent models varied in detail, but in fundamentals *Zeppelin I* was built in the same way as all her successors.

Really Seventeen Small Balloons

An excellent description of the vessel, written by Mr. Thomas E. Curtis, is as follows:—

Conical at both ends, in order that resistance to the air may be lessened, and cylindrical in shape, it measures 300 feet in length and has a diameter of about 39 feet. It looks, even at a close view, like a single balloon; but, in reality, it consists of seventeen small balloons, because it is divided into seventeen sections, each gas-tight, like the water-tight compartments on board a steamship. The interior is a massive framework of aluminium rods, stretching from one end of the balloon to the other, and held in place by seventeen polygonal rings, arranged 24 feet apart. Each ring is supported by aluminium wires, and the whole interior, looked at from one end, appears as if a lot of bicycle wheels had been placed side by side.

It costs £500 and takes five hours to fill a Zeppelin with gas, and the indiarubber coating of the balloons makes them so gas-tight that one filling will last from two to three weeks.

Zeppelin I was driven by two 16-h.p. motors, controlling reversible propellers and placed in

two cars, which swung below the envelope and were connected by an aluminium keel. Along a dragging cable, stretching from fore to aft, there slid an adjustable weight, which enabled the balloon to be raised or lowered at the helm or stern and generally increased its stability.

"Work; do not despair," said Zeppelin to his assistants, when this first vessel, after remaining twenty minutes in the air, came to grief on landing. But long before he had finished the second vessel Zeppelin had come to the end of his resources and announced that he would have to sell up his plant and material.

By now, however, real interest had been aroused in the experiments of the indomitable count. Funds were forthcoming, and on the 9th October, 1903, another Zeppelin left its floating dock, circled Lake Constance, and

The German Government, which had long hung back and refused to support Zeppelin's schemes, at last consented to take over the most satisfactory of his airships, and *Zeppelin IV* was selected to undertake a special trip of 230 miles, from Lucerne to Zürich.

Engine Troubles in *Zeppelin IV*

The fateful voyage started well. *Zeppelin IV* cruised along the Rhine as far as Mainz at a speed of twenty-four miles an hour. After being in the air for twenty hours, however, she was obliged to descend at Echtingen, near Stuttgart, owing to engine trouble.

A sudden change in the weather made the crew anxious at the restarting. Clouds swept across the sky; a breeze sprang up and quickly developed into a gale, and, to make matters worse, a thunderstorm burst over the already embarrassed vessel, which rapidly became uncontrollable.

Superhuman efforts were made to moor the tossing and swaying body of the great airship, but she leapt upwards and almost immediately burst into flames. A few seconds later she had crashed to earth, a mass of mangled aluminium and blazing envelope.

The ruin of *Zeppelin IV* was a terrible blow to her inventor, more particularly as the financial loss incurred seriously jeopardized the position of the company that had been formed to aid him. But the German people rallied splendidly to his support.

As soon as the disaster be-

came known, subscriptions began to pour in, and before long the sum of £300,000 had been raised for the purpose of constructing further Zeppelins.

Extraordinary skill in navigating the airships saved many of them from sharing the fate of *Zeppelin IV*. Several times they were in danger of being battered against tall buildings or trees. *Zeppelin II*, while manoeuvring before the Kaiser, had to be landed in a high wind owing to the sudden breaking of one of her propeller blades. Trouble was again experienced over the mooring of the huge hull as it rolled and pitched in the gale, and disaster was only averted by the courage and promptitude of a number of soldiers, who clung to the keel and remained at their difficult posts until a lull in the wind enabled the airship to be made fast satisfactorily.

THE GREAT INVENTOR IN UNFAMILIAR GUISE



Count Zeppelin as a cavalry general. In the Franco-Prussian War of 1870 Zeppelin proved himself a dashing cavalry leader. It was only after his retirement that he began his researches into aerial navigation.

manoeuvred over towns as far away as the mouth of the Rhine.

The motors of *Zeppelin II* were capable of developing 85 h.p., and another improvement was the addition of linen-covered planes at both ends of the envelope as an aid to steering. *Zeppelin III* was soon completed and made satisfactory flights. Then came *Zeppelin IV*, which had an important improvement in the form of a keel attached to the under side of the envelope, and also a larger petrol tank.

Mr. Ralph Symonds wrote:—

This ship presented a very business-like appearance. You can picture her, a great yellowish-grey shape, throbbing steadily along, swinging her bulk this way and that as the helm is put over, with a serene and majestic motion only equalled by that of a great warship plunging her way through the sea.

Unfortunately a crushing disaster overtook *Zeppelin IV* at a critical point in her career.

THE AIR MONSTER FAILS AND DROPS HEADLONG INTO THE SEA



Zeppelin L 19 wrecked in the North Sea. In the earlier stages of the World War batches of Zeppelins were usually sent out, with a plan of concerted attack. Sometimes adverse winds upset the plan. Thus London might escape, and towns on the east coast come in for attention. Sometimes the Zeppelin motors broke down, when such incidents as shown here resulted.

Another of Zeppelin's airships, the *Deutschland*, suffered disaster through an attempt to land in a blustering wind. She was the first air vessel to be used for passenger service, and in the summer of 1910 made a successful voyage of over 300 miles. Later, with a crew of twelve men and about twenty passengers, she became unmanageable owing to propeller trouble, and, tossed about like a toy balloon in the wind, finally crashed into a wood and was utterly wrecked. This was another blow for the count.

Securing Increased Stability

Experts began to whisper that there were certain insurmountable defects in the rigid type of airship, but the German Government placed implicit faith in Zeppelins. Further experiments showed that greater motor power increased the stability of the airship. In 1909 a Zeppelin made a successful voyage from Lake Constance to Munich in the teeth of a 40-mile gale. Another cruised for thirty-eight hours on a special endurance trip. A third made a flight from Friedrichshafen to Berlin and back in twenty-seven hours, and, encountering a 75-mile gale on the way, moored for three days in an open field without mishap.

Between 1900 and 1919 the Zeppelin Corporation constructed 115 airships of the rigid

type, three of which were experimental, nine specially designed for commercial use, forty for army and sixty-three for naval use. Three airships, the *Victoria Luise*, the *Hansa*, and the *Sachsen*, carried out between them a total of 1,600 successful trips of an aggregate duration of 3,200 hours, covering a distance of 110,000 miles, or more than four times round the Equator, and without mishap to a single passenger.

These figures, quoted from the *Aircraft Year Book*, are sufficient to establish the triumph of Count Zeppelin. Against them there is the final verdict of the inventor himself, who declared, after having lived to see Zeppelins extensively used both in peace and war, that in the future the rigid type of airship would not be able to compete with the aeroplane as a safe and swift mode of aerial transport, more particularly for military purposes.

Balloon Used in Warfare

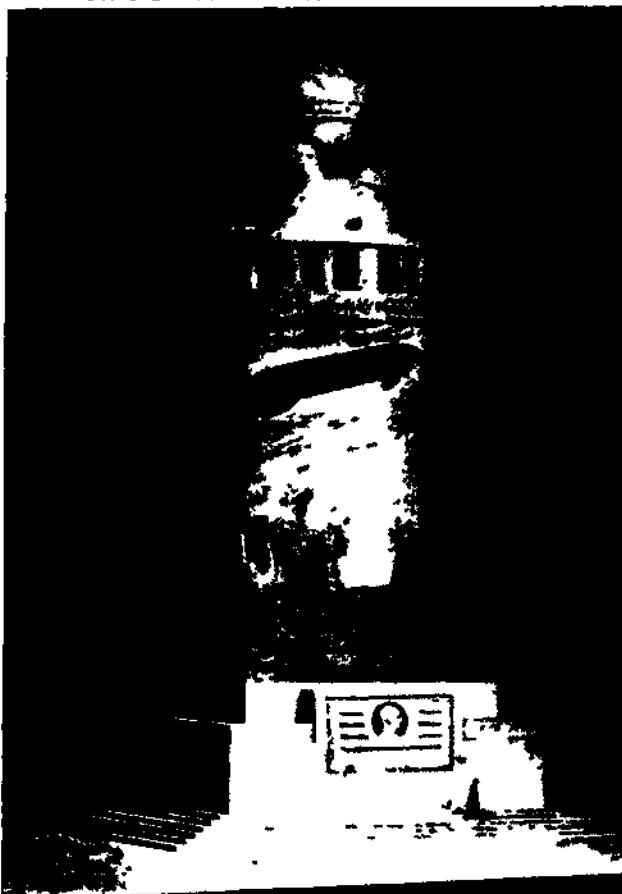
An early occasion on which a balloon was used for warfare was at the battle of Fleurus in 1794. The aeronaut, Coutelle, ascended in a strong wind and made important observations of the enemy's dispositions. Napoleon was so impressed by the value of the balloon for military purposes that he ordered one to be



made and took it with him on his Russian campaign.

It was never used, for the British captured the frigate which was taking it to its destination. Nor was the gigantic dirigible built by the Russians in the same year (1812), and from which bombs were to be dropped, ever brought into action. It failed utterly at its trials. This dirigible was shaped like a sperm whale, and its

IN MEMORY OF A NOTABLE FEAT



A striking monument in Berlin, showing an admiring group of citizens gazing at a Zeppelin, erected to commemorate the landing in Berlin of Zeppelin's first airship.

propeller was designed on the principle of a fish's fin, and operated by hand.

An interesting account of how the German Zeppelin commanders navigated their huge craft during their visits to this country in the earlier stages of the World War was provided by the first volume of the "German Official Naval History," published in 1924.

Four or five Zeppelins were usually sent out together with a fixed plan of concerted attack. But more often than not their plan went astray owing to the breakdown of the Zeppelin

motors or adverse winds. Bombs were then dropped haphazard. For this reason, when London sometimes escaped, towns on the east coast, such as Ipswich or Felixstowe, received the brunt of the attack.

The Germans were evidently well acquainted with our coast-line and the position of our chief towns, for when they did get within sight of some particular place, they were generally right in their report of what they had seen and the damage they had done. In this respect the Zeppelin proved its worth as a means of observation in war time.

On the first raid, for example, they recognized Hull, even though the street lamps had been painted on top. This was because it had been raining, and the damp pavements reflected the light upwards.

One commander describes how he saw London clearly, "as a pool of light," soon after leaving Cambridge. He gives a detailed account of his journey over Aldwych, Lincoln's Inn, across Hyde Park, and then back to Charing Cross.

The object of this raid was to destroy the great newspaper offices in Fleet Street, but the bombs were actually dropped in Aldwych.

Another commander was guided by the lights of Regent's Park, which, he declares, were shining as brightly as in time of peace.

Our Air Defence Improves

During the latter part of 1915 the reports become more exciting. The British air defence rapidly improved, and Zeppelin commanders had to reckon with searchlights, rockets, and anti-aircraft guns, as well as attacks from British aeroplanes.

"Shrapnel burst all around us" is a remark that began to appear frequently in the logbooks of the Zeppelin commanders. At the same time they expressed themselves as being thankful for the fact that the shells fired at them were not inflammable.

Towards the end of 1915 the Germans found that we were learning how to deal with Zeppelins. But it was not till 1916 that the first Zeppelin was brought down by means of the much-dreaded inflammatory shell.

Zeppelin died on the 8th March, 1917, at Charlottenburg. His labours had resulted in the establishment of a unique workshop for the production of the most perfected form of rigid dirigible, and his will always be remembered as the most intelligent mind that had been brought to bear upon the problem of aerial navigation by the lighter-than-air method.

MAGELLAN CONSULTS WITH HIS NAVIGATORS



NAWAB SALA JUNG

BETHUN A. DIXON

On the 21st October, 1520, Magellan in his search for a westward route to the Spice Islands, sighted the eastern entrance of the long-sought strait the Strait of Magellan. Two of his ships brought tidings of an ocean ahead but this proved to be no more than a large bay. Calling a council of his pilots and captains, the intrepid circumnavigator declared that the voyage through the stormy strait should be continued. On the 28th November Magellan sailed into the calm waters of the ocean, which, in contrast to the buffetings he had encountered in the strait, he called the Pacific.

[To face p 14.]

Painted specially for this work by ARTHUR A. DIXON

The FIRST to CROSS the PACIFIC OCEAN

Ferdinand Magellan's Exploits on the Sea, and How He Discovered the Westward Passage to the Spice Islands and Fell Fighting Gamely to the Last

A PARTY of shipwrecked sailors stood in little groups on a small island in the Indian Ocean, anxiously awaiting the break of day. It had been a night of terror, a night that few of them had expected to survive.

A few hours before, they had been wending their way calmly and peacefully towards Mozambique, on the east coast of Africa, bound thence for Portugal, their native land. The motionless air and unruffled ocean had lulled them into a false sense of security. An unsuspected peril had lurked in their path, and, almost before they had realized what was happening, their two vessels had struck a reef. Tranquillity at once gave way to confusion, and, scrambling into their boats, the sailors had succeeded in reaching the friendly island on which they now stood.

Their lives had providentially been preserved, but they had no reason to feel secure. The island might be uninhabited, but more probably it was the home of a race of savages, who would show no mercy to the uninvited strangers in their midst. The Portuguese had few friends in that part of the world.

The first glimpse of daylight revealed the sunken hulls of their vessels, not far distant from the shore, but beyond hope of recovery. What were they to do? After a hurried consultation the captains announced their intention of making for the coast of India, about a hundred miles away. One great problem remained to be solved. The boats would not hold them all—who were to stay behind? At first, no one volunteered. The weather was calm, and there was a reasonable prospect that the boats would reach India in safety. But what fate would overtake those who remained? The perils of the open sea were infinitely to be preferred to the unknown terrors of that little tropical island. First

cajoled, then threatened, the crews obstinately refused to stay behind unless their officers stopped with them, and very quickly an ugly situation arose.

At this critical moment a short, handsome, featured young officer, who had taken no part in the discussion, stepped forward. He was Fernão de Magalhães, more popularly known as Ferdinand Magellan.

"Swear to me that you will bring help as quickly as you can," he said, "and I will remain here with the crews." The promise was made, and, with the captains in charge, the boats set out for India. True to their word, they dispatched a vessel to the rescue at the earliest possible moment, and, after spending a fortnight or so on the island, Magellan and the crews were taken aboard and shipped to India to rejoin their comrades.

The coolness and unselfish heroism that Magellan displayed on this occasion were strikingly characteristic of one of the most famous figures in history. He was essentially the man for an emergency. The many

crises he was called upon to face in the course of his adventurous career served to reveal the great strength of his character, his fearlessness, ruthless determination, and unconquerable spirit. The record of his life, so incomparably rich in achievement, is without serious blemish. Every man has his faults, but it was given to Magellan to have fewer than most. Indeed, the only serious criticism that can be offered against him, exposed as he was to the full glare of publicity, is that at times he was guilty of rashness—a characteristic, bred of over-confidence and too much self-reliance, that was destined to have fatal consequences.

The first European navigator to sail across the Pacific Ocean, the discoverer of the strait that bears his name, and the first to find a route over which ships could sail completely



Magellan was the first to circumnavigate the globe, and the first to cross the Pacific Ocean. He was the discoverer of the strait that bears his name.

round the globe—these are the achievements which entitle the name of Magellan to rank among the highest in the history of maritime discovery.

It was Magellan's fortune to belong to a period remarkable for its geographical discoveries. His was an age of excitement, a time when the whole of Spain and Portugal was ringing with the fame of such men as Columbus, Vasco da Gama, and Balboa. Almost every month the world was being remapped; fresh lands were being discovered east and west; numerous islands and vast tracts of continent were being conquered by enterprising European navigators; gold and riches beyond the dreams of man were awaiting those who were bold enough to go in search of them. In this atmosphere of seething ambition and exaggerated promise, Magellan grew to manhood.

Born and Bred in Wild Surroundings

Born in or about the year 1480, at Sabrosa, in the province of Traz-os-Montes, in north-east Portugal, his boyhood was spent in a rugged country amidst a rugged people. Nothing is known of his early days, but in such wild surroundings he probably led an active life and was soon taught to fight his own battles. Whether he was the pride or the despair of his parents we are not told, and speculation would be futile. It is more than likely, however, that as a boy he showed some promise of developing the high intellect that characterized his manhood.

The son of a nobleman, he pursued his studies, as was usual in those days, at the Portuguese Court, where he became one of the queen's pages. Lisbon was then one of the chief centres of maritime activity, and the youthful Magellan could not for long remain unmoved by what was taking place around him. He saw ships returning from the Indies, laden with precious metals and rich native produce. He saw men in their hundreds flocking to join the expeditions to "foreign parts." He rubbed shoulders with men who had been out to the newly discovered lands, and who spoke in glowing terms of what they had seen.

Hundreds who left Portugal in search of a fortune never returned. That he knew, but the element of danger only added lustre to the project in his eyes. How could the indolent, formal life at Court compare with such a glorious existence as these wonderful tropical countries offered to the man who would embrace it?

Volunteers for a Voyage to India

If any surprise were felt when, in 1504, Magellan left Court and volunteered to join a fleet setting out for India, it could have been only because he had not taken such a step earlier. Francisco d'Almeida had recently been appointed ruler over the territory in India that

had been annexed for Portugal, and it was under this brilliant, strong, and loyal officer that Magellan saw his early service. No better model for an ambitious young man, about to place his foot on the lowest rung of the ladder that led to world-fame, could possibly have been found. It was a stroke of good fortune for Magellan, and he took full advantage of it.

Receives His First Battle-scars

Almeida's fleet, one of the largest ever dispatched on a voyage of discovery up to that time, left for India in March, 1505. Not many months elapsed before Magellan found himself plunged into the throes of excitement. A taste of what was in store for him came when the Portuguese landed on the east coast of Africa and stormed the fortress of Mombasa. A little later, on reaching India, Almeida's force was in constant conflict with the Moors, and in one fierce engagement Magellan received his first battle-scars.

It was an easy matter to appoint the Portuguese commander Viceroy of India, but the task of enforcing his authority over the cosmopolitan inhabitants bristled with difficulties. The Moors did not lack support. Helped by native rulers, by Malays, and by the levies of the Sultan of Egypt, they offered stern resistance, and during the many battles that took place on land and sea Magellan greatly distinguished himself. His fearlessness and personal courage became bywords.

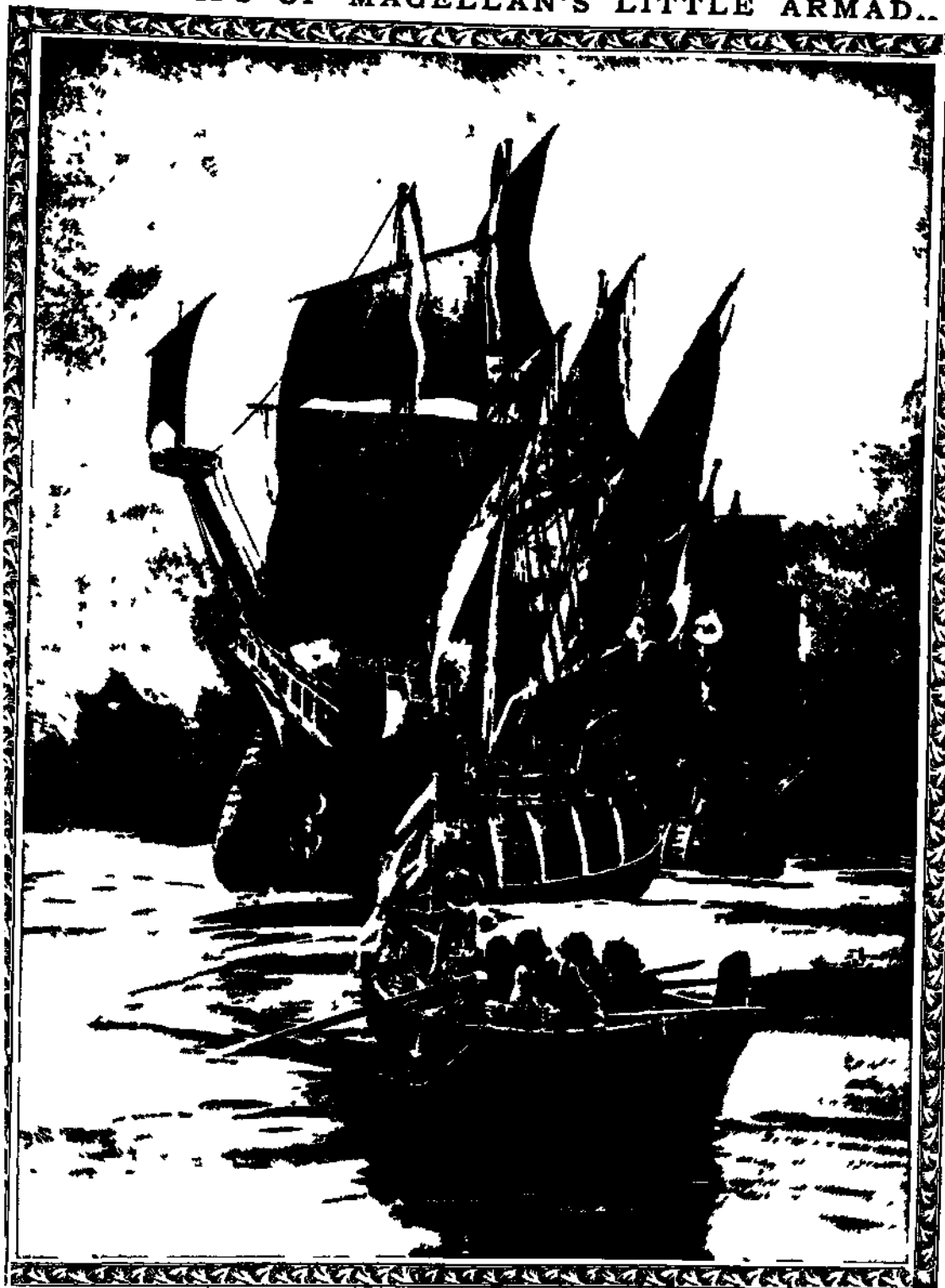
In 1509, he joined an expedition to Sumatra and the Malay Peninsula, and later he probably took part in the assaults on Goa and Malacca. The capture of the latter place opened the way to the Moluccas or Spice Islands, which were popularly supposed to contain riches surpassing even those of the New World. It was, therefore, an event of supreme importance, which could not fail to have impressed Magellan, and from that moment the Spice Islands and his future were to be inseparably associated.

Growing Appetite for Adventure

After an absence of seven years he returned to Portugal, and was given promotion as a reward for his services. Less now than ever was he resigned to a life of inactivity. Before another year had elapsed he joined an expedition against some rebellious Moors in Morocco. Although not much opposition was offered to the Portuguese, Magellan received a severe wound in the leg, which left him slightly but permanently lame. Shortly afterwards there occurred an incident that was to prove the turning-point in his career.

He and another officer had been given the custody of booty captured from the defeated Moors, and, some cattle having mysteriously disappeared, he was accused of having sold

THE SHIPS OF MAGELLAN'S LITTLE ARMADA..



the summer of the year 1519 Magellan left Seville, and on the 20th September his little armada put to sea. Magellan hoisted his flag on the *Trinidad*, the other ships being the *Santo Antonio*, the *Concepcion*, the *Santiago*, and the *Vittoria*. The *Santo Antonio* deserted during the voyage, the *Santiago* was wrecked on reconnaissance duty, the *Trinidad* sprang a leak, and the *Concepcion* was burnt. The *Vittoria* was the first vessel to make the tour of the world.

For biographies not included in the Groups see detailed Index

it to the natives. Indignant at having such a dishonourable charge hanging over his head, he immediately returned home to offer a personal explanation to the king. The latter had already received from Morocco an exaggerated account of the affair, and by the time Magellan arrived opinion at Court was definitely hostile to him. Nevertheless, with complete self-possession and no little audacity, he chose that very moment to press for promotion which he considered to be long overdue.

Loses the Favour of King Manoel

When King Manoel had recovered from his astonishment, he angrily ordered Magellan to return to Morocco, there to meet the charges with which he was faced. Nothing would have pleased the young officer more than to have his conduct investigated, but the matter was allowed to drop, and he had to be satisfied with this semi-confession of his innocence. As soon as he could, Magellan returned once more to Lisbon, hoping to restore himself in the king's favour. It was a hopeless quest. The king refused to listen to him, and it did not take Magellan long to realize that all chance of achieving any glory in his country's service had definitely vanished.

Dejected and conscious of a bitter resentment at the unjust treatment he had received, Magellan turned away from Manoel's Court, and a little later he publicly renounced his nationality. None but a man of iron resolution and ruthless determination could have taken so drastic a step, and if it earned him the abuse of successive generations of his countrymen, it at least removed the fetters that threatened to curb his remarkable enterprise. That act of Magellan's was destined to have far-reaching consequences, for it robbed Portugal of the fadeless glory that was now to accrue to Spain, her great rival in maritime discovery.

Crosses Over to Seville

Accompanied by a handful of discontented fellow-countrymen, Magellan crossed over to Seville in 1517 and became the guest and firm friend of Diogo Barbosa. Their friendship was cemented soon afterwards by Magellan's marriage with Barbosa's daughter, Beatriz, but the union, although happy, was short-lived. Only eighteen months had they spent together when the navigator embarked on his ill-fated voyage, and soon the spectre of tragedy invaded their home. Shortly after the mournful news of Magellan's death reached Seville, his widow lost her little son, and the dual shock had fatal consequences.

Encouraged by favourable reports received from a friend who had remained in the Moluccas, Magellan planned a further expedition to that part of the globe. He intended this time,

however, to attempt to reach the islands by sailing westward. Like Columbus, he believed it was possible to reach the east by sailing west, and he determined to complete, if he could, the work already accomplished by the distinguished Genoese explorer. The existence of a great South Sea, separating the New World—discovered by Columbus—from the eastern provinces of the Old World, had been proved by Balboa, and the problem confronting Magellan was to find a passage through the southern continent of the New World that would take him to the ocean beyond. Scientists of that day were sceptical of the existence of such a channel, but Magellan was confident that one would be found.

Taken Before the King of Spain

His proposal to go in search of the mysterious strait had been contemptuously rejected by King Manoel of Portugal, and the dauntless navigator now sought to interest young King Charles of Spain in his projects. The king's advisers at first showed no more sympathy with Magellan's plans than had Manoel, but one of them, Juan de Aranda, possessing more insight than the others, interested himself in the proposal and took Magellan and his fellow cosmographer, Ruy Faleiro, before the king.

There was a mutual understanding between Spain and Portugal at that time that the former country should concentrate on discoveries in a westerly direction, leaving the east to her neighbours. Magellan's contention, therefore, that the rich Spice Islands could be reached from the west, and that they belonged as a right to Spain equally as much as to Portugal, could not fail to impress Charles, and he agreed to fit out a fleet of five vessels with a complement of between 250 and 300 men.

Delighted beyond measure at obtaining royal support, Magellan lost no time in making preparations for his voyage. His intentions, however, became known in Lisbon, and persistent efforts were made to persuade him to abandon his project. When these were seen to be of no avail, many former countrymen of his openly advocated that he should be assassinated but, apart from a few hindrances and delays engineered by Portuguese agents, Magellan had no cause to complain of serious interference, and by the summer of 1519 his five ships were in readiness for sailing.

The Vessels of His Little Fleet

None of the vessels was very serviceable, and the largest—the *Santo Antonio*—was only 120 tons burden. Magellan hoisted his flag in the second largest, the *Trinidad*, the other three ships being the *Concepcion*, the *Vittoria*, and the *Santiago*. A large number of articles, including many thousand bells, were taken to be bartered,

with the natives, and the equipment in other respects was on a generous scale. Mass was celebrated, prayers were offered up for the success of the expedition, and in September, amidst scenes of mingled grief and rejoicing, anchor was weighed and the little fleet started on its memorable voyage. Fortunately none of the adventurers knew what the future held. Triumph was to be achieved, but never was it to be so hard-earned, never was victory to be so dearly purchased.

Before they sailed, Magellan and Faleiro had apparently disagreed. For some reason, at any rate, Faleiro detached himself from the expedition. Magellan had reason to believe, therefore, that he would be left in undisputed command, but he was speedily to be disillusioned. From the first, certain of his captains were inclined to dispute his authority, but he did not become seriously apprehensive until one day he received a letter from his father-in-law, warning him against treachery. This induced Magellan to regard in a graver light the repeated insults he received from Juan de Cartagena, captain of the *Santo Antonio*, and the climax was reached when, nearing the coast of South America, the latter bluntly refused to take orders from the commander.

Cartagena Mistakes His Man

Cartagena was soon made to realize that he had mistaken his man. Magellan was the last person to brook interference with his plans, and without further ado he had the surprised captain arrested and placed in strict confinement. Thus the first bout ended in Magellan's favour, but the struggle was far from being over.

The expedition arrived at Rio de Janeiro in December without other untoward incident, and, after entering the harbour, made a short stay to give them an opportunity of trading with the natives. Quantities of fish, sweet potatoes, or fruit were willingly exchanged by the natives for such negligible articles as a mirror, a fish-hook, a comb, or a small bell. Perhaps the luckiest person of all, however, was the chronicler of the voyage, an Italian named Antonio Pigafetta, who received several fowls in exchange for a court card from a pack of playing cards.

To Pigafetta, more than to anyone else, the

world is indebted for the history of the voyage, Magellan apparently did not keep a journal, or, if he did, it was not preserved. Even the Italian's account is not entirely authentic, for it is a medley of hearsay evidence and personal experience, but at least Pigafetta could claim that his story was written in picturesque language. Thus quaintly he describes a bird encountered on the voyage: "There is one kind of bird of such a nature that when the female

THE NAVIGATOR IN HIS FLAGSHIP



Magellan in his flagship, the *Trinidad*, from an old print. Here you see the navigator manipulating his nautical instruments, which, though they appear quaint to our eyes, must have been amazingly effective.

wishes to lay her eggs, she goes and lays them on the back of the male, and there it is that the eggs are hatched. This kind have no feet, and are always in the sea."

His description of the terrors inspired by the sight of a storm at its height at sea, is no less graphic. "The body of St. Elmo appeared to us on many occasions," he wrote. "One very dark night it appeared in the form of a fire,

lighted on the mainmast, where it remained two hours, comforting us greatly, for we were in tears, only expecting the hour of perishing." The appearance of St. Elmo's fire—in reality, a very rare kind of lightning—was always regarded as a good sign, for "when this light once descends on a vessel, she is never lost."

Leaving Rio, Magellan sailed down the coast of South America, eagerly searching for the strait that would take them into the Pacific. Though he made many interesting discoveries, he could not find the long-sought-for channel, and he was finally driven, by severe storms and the cold weather, to seek winter quarters in a bay on the coast of Patagonia. The crews at once began to show signs of discontent, and their drooping spirits were not revived when an order was made that their rations were to be reduced. The expedition, and, with it, Magellan's career, had reached the most critical stage of its history.

Life More Precious than Riches

Few of the voyagers were sanguine enough to think that they would discover the strait, and they asked themselves daily for what purpose they were being kept in that cold, stormy part of the world, insufficiently fed and in constant danger of their lives. Much better to return at once to sunny Spain, they said, and let it be known that the great continent of the New World extended without a break to the Antarctic regions. Life was far more precious to them than all the gold and rich spices of the promised land.

At first Magellan's attempts at pacification were successful. He appealed to their sense of duty and honour, drew a glowing picture of the glory that was awaiting them, and stated that he was determined never to return to Europe except by pursuing a westerly route. His appeal did not fall entirely on deaf ears, as he had cause to remember with gratitude a short time afterwards, but the more discontented amongst the crew became increasingly bold and rebellious, and signs were not wanting that only a match was required to ignite the glowing embers of revolt.

Cartagena Fomenta a Mutiny

One dark night the blow fell. Cartagena was released, and, accompanied by the captain of the *Concepcion*, he boarded the *Santo Antonio* and forced her Portuguese commander to surrender. By the morning the *Vittoria* also had been persuaded to join in the mutiny. The little *Santiago* apparently remained loyal. When news of the revolt was communicated to Magellan, matters had already gone so far that to attempt to come to terms with the rebels was hopeless.

Swift, decisive action was called for, and this

the resolute "captain-general" saw was forthcoming. A handful of men sufficed to win back the *Vittoria*. Then Magellan was at liberty to engage his old enemy, Cartagena. During the day no attempt was made to attack the mutineers, but at night the commander closed the passage of the harbour to prevent any escape, and bore down on the two ships. A short, sharp fight ensued, the battle was won, and the rebellion was quelled. As an example to the rest of his men, Magellan had the ring-leader executed, while Cartagena was taken ashore and there left to his fate.

Good Comes Out of Evil

Although at first it threatened disaster to the expedition, the mutiny served more than one useful purpose. It revealed Magellan as a man of action as well as of words; it greatly enhanced his reputation among the crew; it reduced the possibility of further trouble of a like nature to a minimum; and it left Magellan in undisputed authority. It was, therefore, with the highest hopes that he set sail again in the middle of October, when spring arrived with its promise of calmer weather.

The *Santiago* had meantime been wrecked while on reconnaissance duty, but the other four vessels bravely withstood the terrible storms and escaped disaster. At length, on the 21st October, their patience and long-continued sufferings reaped their reward. Rounding a promontory, Magellan saw before him the strait, in whose existence he had so steadfastly believed, and which was ever afterwards to bear his name. As Columbus was actually the first European to set eyes on the New World, so was Magellan the first to descry the strait that was to open the Pacific Ocean to the civilized world.

Tidings of a Great Ocean

Half afraid that his eyes were deceiving him, Magellan sent two of his ships ahead to discover where the passage would lead them. Not for two or three days were his anxieties completely allayed, but when at last the ships returned and reported that the strait led to a great ocean beyond, his heart was full of rejoicing, and the fleet proceeded.

Before very long the "ocean" proved to be nothing but a large bay in the strait, and when they realized this, Magellan's officers sought to persuade the commander to return to Spain and bring out a larger fleet before attempting to explore the mighty South Sea. Magellan, however, would not listen to their counsel. To turn back when one of the greatest geographical discoveries of all time was within his grasp and his life's dream was on the eve of realization, was unthinkable.

So the little fleet, led by its indomitable



commander, continued its journey, and for over a month battled its way through the storms and strong currents of the 365-mile strait. On the 28th November, 1520, excited shouts and the booming of cannon told Magellan that "the great western ocean" had been reached, and with feelings too deep for expression he gazed across the mighty expanse of water slowly unfolding before him. This ocean, discovered by Balboa seven years before, looked so calm and peaceful that he named it the Pacific. Three only of the remaining ships completed the passage. The largest—the *Santo Antonio*—had turned back to Spain, where, in order to hide their cowardice, the deserters spread false reports of Magellan's harsh conduct, cruelty, and dilatoriness.

WHENCE MAGELLAN SET OUT FOR INDIA



The tower of Belem, near the mouth of the Tagus, erected in 1530 to protect shipping. From Belem Magellan sailed on his first voyage, under Francisco d'Almeida, first Viceroy of India, and in India Magellan received his first battle-scars.

Their plight soon became terrible in the extreme. So low did the provisions run, that rats and leather were looked upon as delicacies, and, as a result of lack of food and of drinking water that had turned thick and yellow, many deaths from scurvy occurred. Over ninety days elapsed from the time they left the strait until they reached the Ladrones—probably the island of Guam. Here they were able to obtain fresh provisions and water, but the hostility of the natives drove them to the Philippines, where they arrived a week later. Anxious for the safety of the expedition, Magellan took great pains to establish friendly relations with the various native kings, and after the usual exchange of presents he entered into a treaty of peace with the king of Cebu.

Magellan's profession of friendship admirably

suit the plans of this treacherous monarch, and, in order to please the European navigator, he even consented to be baptized, and allowed his people to be converted to the Catholic faith. Fired with religious zeal, Magellan was induced to undertake an expedition against the neighbouring island of Mactan, in order to conquer it for the "Catholic" king of Cebu, and on the 27th April, 1521, he made a bold attack on the natives, who had gathered along the shore.

Killed by the Natives

It was a fatal error of judgment. Completely outnumbered, his little army reached the coast only to be swept back into the sea. Magellan himself, badly wounded, but courageous to the last, was engaged in a hand-to-hand combat with several of the natives, but at length, still fighting gamely, he was overwhelmed and killed.

When the fight was over, an effort was made to secure his body, but the natives obstinately refused to hand this over. His remains were accordingly laid to rest in the island of Mactan, where a monument was afterwards erected to his cherished memory.

After the death of their captain the gallant Serrão, who had distinguished himself by his unflinching loyalty, and Barbosa, Magellan's brother-in-law, jointly assumed command. They were destined, however, to survive their leader only by a few days. Lured ashore by the king of Cebu on the pretence of being given presents, they and several others were murdered.

The *Vittoria* alone Remains

The survivors set fire to one of the three remaining vessels and escaped to the Spice Islands. Another vessel became so leaky that she had to be abandoned, and, when the last stage of the voyage was entered upon, the rapidly decaying *Vittoria*, laden with spices, was all that remained of Magellan's brave little fleet. With water pouring into her hold so quickly that her crew never left the pumps day or night for nearly a month, she rounded the Cape of Good Hope and reached Seville on the 8th September, 1522.

Of the original expedition that had set out almost three years before, only Sebastian del Cano, who had succeeded to the command, and about eighteen Europeans remained. These men had accomplished the first circumnavigation of the globe. So, too, had their gallant commander, the brilliant and lovable Magellan, who lay at rest in the isle of Mactan, for on his first expedition he had penetrated 6° longitude farther east than the spot where he fell and which he had reached from the west.

[See "First Voyage Round the World by Magellan," published by the Hakluyt Society (1874); and *Life*, by F. H. H. Guillemard (1890).]

NORTHCLIFFE the NAPOLEON of the PRESS

The Great Journalist Who said: "There is no Task a Man cannot Accomplish if He is only Willing to Devote Himself Day and Night to it"

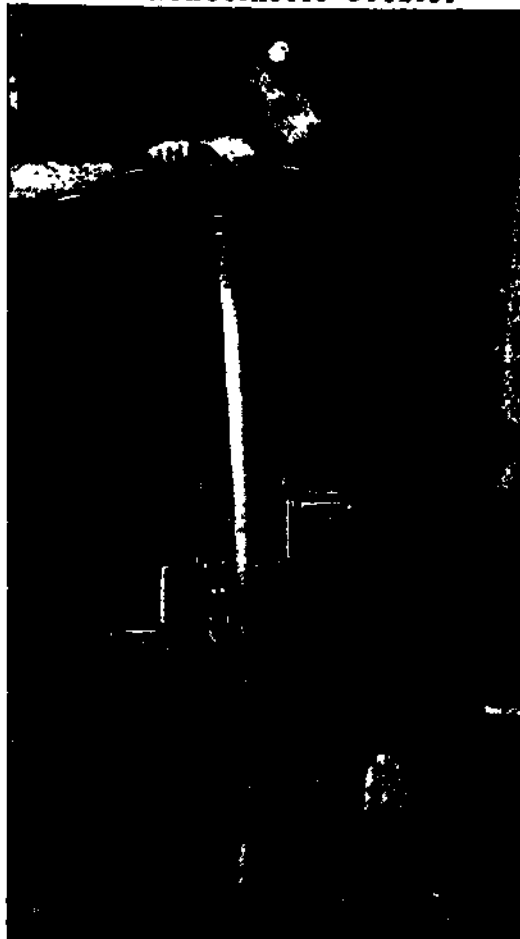
A STRONG facial resemblance to the Little Corporal as pictured in popular prints, a similar power of concentrated and sustained effort, a marked likeness of methods though applied to a different sphere, and a personality at once particularly forceful and peculiarly magnetic caused cartoonists of pen and pencil to dub and portray Viscount Northcliffe as "the Napoleon of the Press."

Alfred Charles William Harmsworth, the most powerful newspaper magnate of the first two decades of the twentieth century, was born at Chapelizod, near Dublin, on the 15th July, 1865. He was the eldest of fourteen children, including "a compact band of brothers," as he admitted in after years, "all interested in the promotion of the family fortunes." His father was a barrister, and, as is not unusual in the most well-meaning of parents, he wished his son to follow his profession. He had him photographed in wig and gown, doubtless with the intention of showing the portrait to the sitter when the latter had won success at the Bar. In this he reckoned without his namesake, who contested the idea with such forensic ability that the man of law felt compelled to give way to the boy of letters. Many years after, by a strange irony not unusual in human affairs, the successful pleader became principal proprietor of *The Times Law Reports*.

The future viscount's sympathies were with the present and the future. The past fascinated him but little. Previous to being placed in charge of a private tutor, he went to a school in St. John's Wood, London. One of his

playmates describes him at that time as "a typical, jolly, blue-eyed schoolboy, a sunny lad, with laughing eyes, and a dash of daredevil, full of life and fun, and with no self-consciousness." Alfred Harmsworth was keen on athletics, including cricket, football, and cycling, and he made a fine collection of birds' eggs.

AN ENTHUSIASTIC CYCLIST



In his boyhood days Alfred Harmsworth was a keen cyclist, and also took an active part in several other sports, including cricket and football.

He started a school magazine, and some evidence of his self-reliance is afforded by his editorial outlook. "I have it on the best authority," he writes in No. 1, "that the paper is to be a great success." The sequel is to be found in No. 2, in which he announced, "I am glad to say that my prediction as to the success of the magazine proved accurate." Even in those early days he showed that he had commercial as well as literary ability, for double numbers were frequent. On the other hand, he showed no leaning towards mathematics. If he could make money he was content to let others count it for him.

He contributed to the local paper, and showed generally that he had a natural bent towards journalism. As his outlook on life and letters widened, he sought for larger fields of endeavour and submitted articles to *Bicycling News*, the property of Mr. William Iliffe, whose firm, under the name of Iliffe & Sons, Ltd., is now one of the largest publishers of technical literature in the world. The contributions were duly accepted, and the young writer eventually became associate-editor of the journal, following a brief occupation of the editorial chair of *Youth*, a journal owned by Sir William Ingram, and

a spell of hard work and small pay as a free-lance. He afterwards confessed that during the eighteen months he was with Mr. William Liffé he "learnt much from him."

Harnsworth was now twenty-one years of age, with a few hundred pounds in the bank and a burning ambition to own a daily newspaper. Unfortunately, his capital was not sufficient to produce even a single issue of the journal he had in mind, but that did not debar him from keeping his main object in view.

Was it possible to start in a small way and gradually build up a business that would eventually enable him to save sufficient money to start the paper that was already planned in his busy brain? There was a chance, remote enough in very truth, but he took it. He did not fear failure because he refused to recognize its possibility.

He started publishing little books for the masses, and wrote "A Thousand Ways to Earn a Living." The latter was issued in May, 1888, at one shilling. In the light of subsequent events, a few sentences from his chapter on Journalism are of considerable interest:

The Press affords a moderate prospect of a livelihood to those able to write freely and with judgment upon a variety of subjects, to expert shorthand writers, and to specialists in any of the prominent branches of useful knowledge.

It gives no scope for genius, or genuine originality and powers of composition, and the work is frequently severe. The remuneration is about equal to that of a first-class bank, but, as in most other branches of mental labour, the earnings depend almost entirely upon personal capabilities.

It is impossible to hide successful newspaper work under a bushel. Rival newspaper proprietors are ever on the look-out for smart men, and are loath to lose a valuable assistant, for it is a known fact in the newspaper world that the majority of new ventures are promoted by newspaper men who have been underpaid or unfairly dealt with by their employers. A good man has, therefore, excellent prospects of advancement.

It says much for the energy and thoroughness of the author of this novel encyclopædia that

he dealt with such diversified subjects as the care of lunatics, ballet-dancing, and brick making. He correctly summed-up the then existing policy of suppressing all attempts at style so far as literary composition was concerned. Journalism at that time was of the most stereotyped description. To state a fact in an attractive way was regarded as a grievous sin. When Northcliffe invaded the realm of the daily Press he completely reversed this policy.

In June, 1888, the enterprising young jour-

nalist founded *Answers to Correspondents*, the title of which was afterwards shortened to the now familiar *Answers*. It made no great impression on the public when it was launched, for only about 13,000 copies were sold of the first issue. The editor, harbouring his slender resources, wrote much of the contents himself, and it was not until the autumn of the following year that the periodical really began to make substantial progress. He then offered the unprecedented prize of £1 a week to the reader who succeeded in giving the nearest calculation of the amount of cash in the banking department of the Bank of England at the close of business on a certain day.

Over 700,000 competitors took part, and as each of them was required to give the names and addresses of five of his friends, the scheme was a magnificent advertisement.

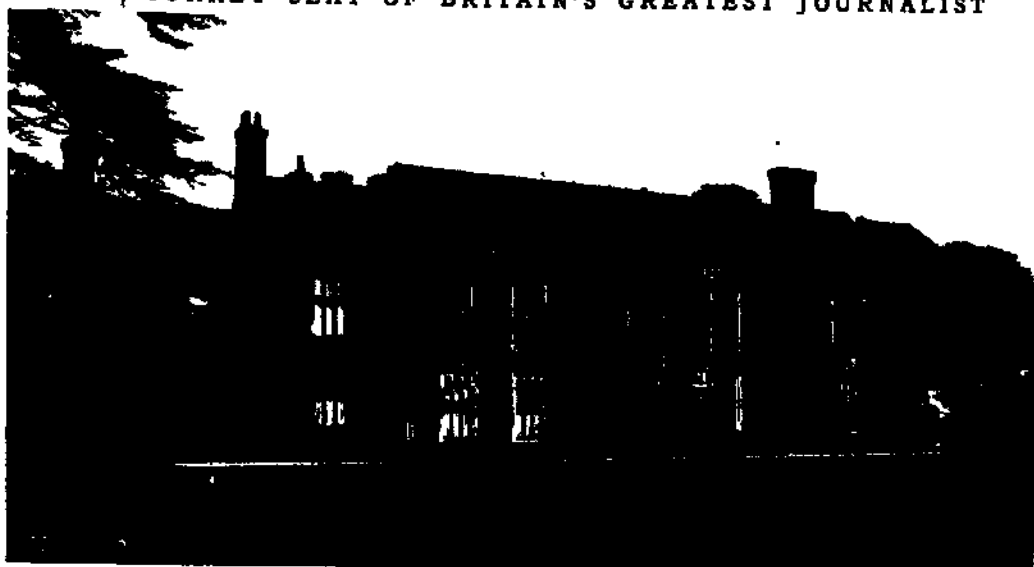
No sooner was *Answers* thoroughly established than humorous papers, periodicals for women and juveniles, religious journals and magazines were planned and produced in a way that quite astonished less enterprising proprietors, who consoled themselves with the thought that young Harnsworth was rapidly nearing his Waterloo. The one small room in Paternoster Row, rented at 15s. a week, was left for a suite of offices in Fleet Street, which in turn was vacated for a building near the Temple, with an extensive printing works in

WHILE ON HIS WORLD TOUR



This photograph was taken while Lord Northcliffe was on his world tour. He embarked on this holiday to recuperate his health after a rather serious throat operation.

THE SURREY SEAT OF BRITAIN'S GREATEST JOURNALIST



Sutton Place, the country seat of Lord Northcliffe, near Guildford, Surrey. Here he spent most of the little leisure that the exigencies of business permitted him. He had another seat—Elmwood—at St. Peter's, in the Isle of Thanet. During the World War enemy aircraft made repeated attempts to bomb this residence.

the rear. The business, as its founder afterwards admitted, went through a greater period of adversity than most ventures. It had all kinds of difficulties to face, and for many months "experienced struggles compared with which those of some other successful newspapers were of but little account. But out of adversity came knowledge and determination, and the narrowness of our circumstances compelled us to probe every detail of newspaper production. Little by little the business grew."

Buys the *Evening News*

The early vision of a daily paper was not allowed to fade, but Alfred Harmsworth's invasion of the realm of newspaperdom came in a way that neither he nor his business rivals anticipated. In 1894 the *London Evening News* was for sale, and two enterprising young journalists obtained an option to purchase it. After several unsuccessful attempts to raise the necessary capital, a friend suggested to one of them that they should approach the enterprising founder of *Answers*. At first Harmsworth was not enthusiastic, but after a personal examination of the books and machinery he decided to buy the property. The *Evening News* had never paid a dividend to its former proprietors, but in twelve months it had "turned the corner" and earned over £14,000.

In 1894 he also equipped and financed the Jackson-Harmsworth Arctic Expedition, which explored Franz Josef Land. The *Windward*, a staunch Scottish whaler, was secured, and the band of adventurers established their head-

quarters at Cape Flora, the big wooden house in which they lived being called "Elmwood," after Harmsworth's seaside home at St. Peter's, near Broadstairs. The most dramatic incident that occurred was the meeting of Mr. F. G. Jackson with Dr. Nansen. Says the former:

On the 17th June (1896) I met Dr. Nansen, three miles out on the floe to the south-south-east of Cape Flora, under most extraordinary circumstances. He had wintered in a rough hut within a mile or two of our northern limit in 1897, and this spring we unknowingly came to within a few miles of his winter quarters. He had left the *fram* with one companion, and reached the latitude of 86 deg. 14 min., travelling north-east from the spot where he had left his ship (which was in 84 deg. north latitude, 102 deg. east longitude). It has been a great pleasure to me to be the first person to congratulate him on his great success. Our meeting was all the more remarkable as Nansen, owing to the great discrepancies in Payer's map and to the fact that his two watches had stopped, was entirely uncertain of his whereabouts. He, on the other hand, was quite unaware of our presence in Franz Josef Land, and expressed the greatest surprise and the liveliest satisfaction in meeting with us.

Preparations for the Morning Journal

Having successfully embarked on the stormy sea of daily journalism, Alfred Harmsworth began to make his preparations for the launching of the morning journal that had been his "vision splendid" since youth. He worked quietly and confidently, and even found time to contest Portsmouth as Conservative candidate in the General Election of 1895. A building was secured, machinery ordered, and correspondents enrolled. Trial numbers, which never saw the light of day outside the premises

in which they were printed, were produced and criticized. After eighteen months of preparation No. 1 of the *Daily Mail* was published on the 4th May, 1896, and 397,215 copies were sold. Alfred Harmsworth was then thirty years of age. For two days and nights he remained in the office, after which he went home and slept for twenty-two hours, and even then he did not awake of his own accord.

With characteristic enterprise, a series of express trains was organized when the South African war broke out in 1899, so that the newspaper might reach all parts of the country.

WIFE OF LORD NORTHCLIFFE



In 1888 Lord Northcliffe (then Alfred Harmsworth) married Mary Elizabeth, the daughter of Robert Milner, of Kidlington, Oxford. She is now the wife of Sir Robert Hudson.

Some time later a northern edition of the *Daily Mail* was printed and published in Manchester, and the continental *Daily Mail* was established with head offices in Paris.

Having purchased the *Weekly Dispatch* in 1903, Harmsworth's thoughts turned in the direction of a morning newspaper for women, to be called by the appropriate title of the *Daily Mirror*. Despite the most careful preparation and lavish expenditure on publicity, it was, to use its proprietor's own words, an "abject failure." Eventually, after £100,000 had been swallowed up, Harmsworth decided to "make an experiment with it" by reducing its price from one penny to a halfpenny, and

remodelling it as an illustrated journal for both sexes. The enlargement of its scope turned failure into triumph, necessitating a new home and additional machinery. In a period of eight months the sales jumped from 30,000 to over 200,000 copies a day. Eventually, the founder transferred the *Daily Mirror* to his brother, Lord Rothermere. The ultimate ambition of many journalists is to become editor of *The Times*, but it was not that of Harmsworth, who aspired to its proprietorship. He had nursed this hope in secret for many years, and in 1908 it became a reality. Among the many innovations which he introduced was the reduction in price to one penny, a more business-like arrangement of its contents, the installation of modern printing machinery, and the improvement of its cable services.

His Greatest Hobby

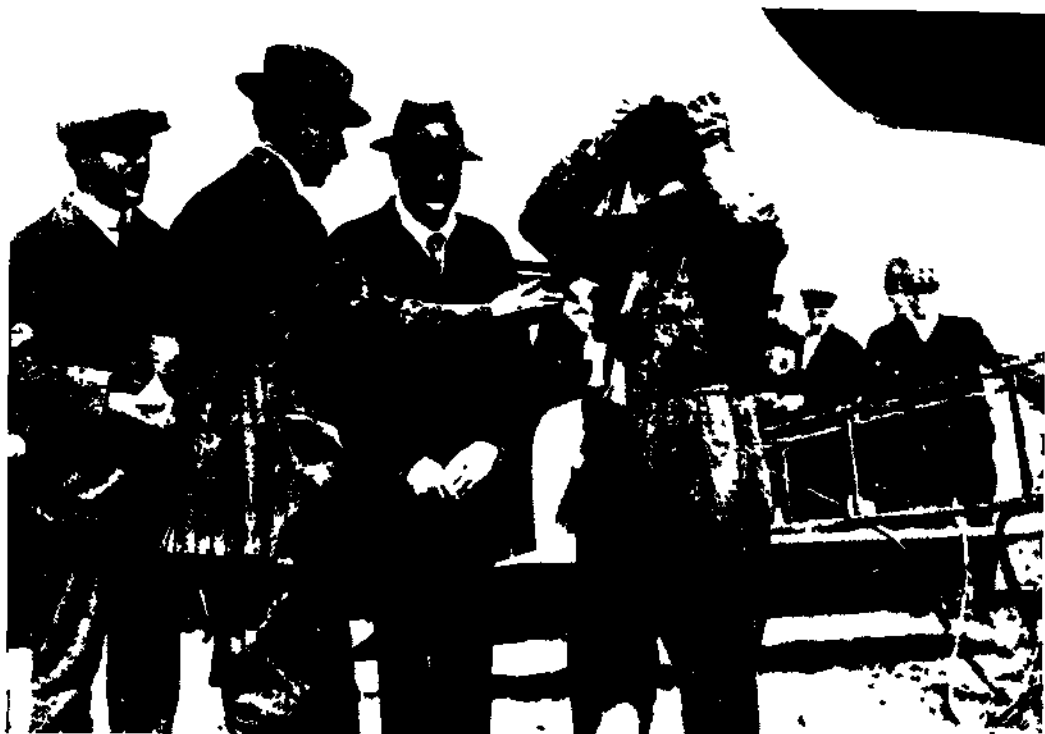
Created a baronet in 1904 and a baron in 1905, Alfred Harmsworth took the title of Northcliffe. In the usual amusements of Society he took little interest. He had no time to waste. Work was his greatest hobby, and he got through an amazing quantity of it, despite frequent spells of ill-health. Although he never suffered fools gladly, he forgave readily enough if a member of the staff showed that an error was not the result of neglect or carelessness.

"Concentrate your energies and work hard," was his advice to the beginner. "Launch out in new experiments, never be afraid to have the courage of your opinions. Fix the lines you want to travel along and keep on them. It is often impossible to tell just where the waiting opportunity lies. There may be an element of chance in the matter. This is illustrated by an old Persian saying about a certain pavement that was supposed to have lumps of gold under it. The man who should lift none of the pavement, the saying went, would get none of the gold. He who should lift part of it might, or might not, find gold. But if he should lift all of it, he would obtain the treasure."

An Example of His Foresight

Northcliffe had a truly marvellous faculty for looking ahead. For instance, Mr. Hartley Aspiden, an old colleague, says that even at the time when the *Evening News* was purchased, the Chief, as he was invariably termed by those who worked with him, scented the gunpowder of a great conflict from afar. "There is going to be a big War," he remarked, "and when it comes all my penny and halfpenny periodicals will be snuffed out. Circulations of periodicals will go down, but the circulation of newspapers will go up." His foresight was further evidenced in 1906 by the foundation, in association with Lord Rothermere, of the Anglo-Newfoundland Development Company for

PRESENTED TO THE WINNER OF A DAILY MAIL PRIZE FOR FLYING



In the early days of aviation, Lord Northcliffe did much to stimulate interest by offering large sums of money for competition among airmen piloting heavier than air machines. The picture shows him with Jean Conneau, who adopted the pseudonym of André Beaumont, after he had won the *Daily Mail* £20,000 for a flight round Great Britain, in 1911.

the supply of newsprint. This great concern now owns no fewer than 3,400 square miles of forest in Britain's first colonial possession, with paper mills, town, railways, and steamers.

Northcliffe was a great believer in the progress of science, and though he was by no means of a mechanical turn of mind, machinery had a strange fascination for him. He was one of the earliest drivers of a motor-car, he made descents in submarines, and when aircraft were apt to be considerably more unstable than is now the case, he took a trip in an aeroplane.

His Prizes for Aviation

With the development of aviation he had much to do, and by way of encouragement he announced a prize of £10,000 for a flight from London to Manchester by aeroplane. This was in 1906, and two similar sums were afterwards offered. Although he fully appreciated the possibilities of aerial navigation for peaceful purposes, his main interest was in its development for use in war. In vain he urged the Government to build aircraft on an extensive scale, and he was a most convinced believer in a powerful and efficient navy, which he never ceased to advocate.

His influence on the course of the World War of 1914-1918 was far reaching. Never a believer in half-measures, he fought by word and deed with relentless purpose. For years he had refrained from publicity, content to plan and work behind the scenes, but then he came out into the limelight. He was at once the most praised and the most hated man in the Empire.

Strongly Urges a Blockade

He called loudly for Lord Kitchener to assume command of the War Office, and he afterwards criticized him without remorse for the shortage of ammunition. He pleaded for national service until it became a reality. He urged the necessity for the tightening-up of the blockade, and when he received information that the Gallipoli expedition was serving no useful purpose, he used his powerful influence for its withdrawal. When he was convinced that the Asquith Ministry was less efficient than he thought it ought to be the support of his newspapers was withdrawn in favour of Mr. Lloyd George. If he acted as a dictator it was because he felt that he was called upon to do so by his own inner convictions.

In Germany, Northcliffe was regarded with

particular hatred. The *Anti-Northcliffe Mail*, filled with vitriolic abuse, afforded him much amusement, and a medal to the dishonour of the "moulder of the English mind" was struck. On one side was a half-length figure of the principal proprietor of *The Times*, with a most demoniac expression on his face, and on the reverse he was represented as a fiend setting fire to the world and handing out copies of his newspapers to feed the flames.

Elmwood Bombed by Aircraft

During one of the several destroyer attacks in the Channel, the library of his house at St. Peter's was hit by a shell splinter, and a woman and two children were killed in a neighbouring cottage. Attempts were made to bombard Elmwood by aircraft, without disastrous results, and, although he had a dug-out for the use of his household and friends, he seldom sought cover in it. When the warning siren was heard he just went on with what was occupying him at the moment, for he was a man of iron courage and something of a fatalist.

Lord Northcliffe paid many visits to the various fronts, and wrote a number of articles for his newspapers on what he saw and heard, some of which were afterwards published in a volume entitled "At the War." He refused important offices, including that of British Ambassador at Washington, but, in 1917, he accepted the arduous post of chairman of the British War Mission to the United States. He had already paid several visits to America in less strenuous days, and was received as a welcome friend. The thousands of miles which he travelled in the United States and Canada, co-ordinating the various British organizations and making speeches, undoubtedly compelled him to draw an overdraft on the bank of health, though he failed to realize it at the time.

Praise from the War Cabinet

On his return to London, towards the end of the year, Lord Northcliffe was raised to the rank of viscount in appreciation of the valuable services he had rendered, and he was invited to become Air Minister. What his work in the United States meant in pounds, shillings, and pence may be realized by the significant fact that he controlled the spending of no less than £10,000,000 a week. The War Cabinet cabled their "complete satisfaction" with the way he had conducted his work, but Northcliffe did not see his way to accept the responsible post that was offered to him. He wished to retain his right to criticize the Government, with certain members of which he was not in sympathy. This did not preclude him from accepting the directorship of Propaganda in Enemy Countries, on the distinct understanding that he and his newspapers should retain

their independence. The department came into being in February, 1918, although so far back as October, 1914, Lord Northcliffe had done similar work in a minor way. Headquarters were at Crewe House, the London home of the Marquis of Crewe, and a very short time elapsed before the department was at work. Northcliffe's policy was that propaganda "should form opinion without opinion realizing that it is so being formed," and from the very beginning he laid down the rule that nothing but the plain, unvarnished truth was to be told; inspiration was not even to garnish the dish.

Attack on Austria-Hungary

The preliminary attack was made on Austria-Hungary, a ramshackle empire compared with the closely-knit group of states ruled by the German Emperor. Indeed, the pro-Germans were actually in a minority. As a result of the efforts of Lord Northcliffe and his colleagues, many desertions from the army took place, and the Austrian military plans for a great offensive against Italy had to be postponed. When they were put into operation they resulted in failure.

In August, 1918, over 100,000 leaflets a day were dropped over the German lines by means of paper balloons filled with hydrogen, the literary matter being released by the action of a lighted fuse to which the little bundles of propaganda were attached.

Orders were given to the German army that it was the duty of every officer and man to hand any "mischievous leaflets" found to his unit, and rewards were offered for copies surrendered. Northcliffe was stigmatized as "that unprincipled, unscrupulous rascal," who would be "pilloried in world-history for all time." Ludendorff rightly termed him "a master of mass-suggestion." The enemy's propaganda, he admitted, was carried out "with such method and on such a scale that many people were no longer able to distinguish their own impressions from what the enemy propaganda had told them."

Cost of the Propaganda Work

On the day following the signing of the armistice with Germany, Lord Northcliffe resigned. "I have had many direct evidences of the success of your invaluable work and of the extent to which it has contributed to the dramatic collapse of the enemy strength in Austria and Germany." So wrote Mr. Lloyd George. When results are considered, the cost was exceedingly small, for, during the last four months, the total cost of Northcliffe's activities in undermining the *moral* of the enemy was only £31,360.

In the following year the most active of British newspaper proprietors underwent a

serious operation for thyroid trouble. He made an excellent recovery, but was never quite the same man, and in July, 1921, he started on a world tour in order that he might have prolonged rest. Actually, he crowded into his holiday an amazing amount of hard work. He had scarcely left Southampton before he started dictating an article about the liner on which he travelled. He was fêted here, there, and everywhere, invited to receptions, compelled to make speeches and to submit to interviews. He visited the United States, Canada, Honolulu, Australia, New Zealand, China, Japan, Indo-China, India, and Palestine. It was a triumphal procession rather than a quiet holiday, but he enjoyed every minute of it.

Imperial Pathfinder

If Northcliffe was "a great Imperial pathfinder, a man of wide vision and decisive action," as Sir Joseph Cook called him, he was also a critic of positive and candid conviction. He realized the peril of Australia as regards Asiatic ambitions, the too practical interest of Japan in China, and the great unrest of India's millions. Shortly after his return to England, in 1922, he began a tour in Germany, but was taken grievously ill and brought back to his London home, where he died on the 14th August, 1922, at the early age of fifty-seven. Following a funeral service in Westminster Abbey, the worn-out body was laid to rest in St. Mary-lebone Cemetery, Finchley.

He had overworked for years, for despite his hobbies, such as motoring, fishing, and golf, his mind during waking hours was scarcely ever at rest. If he was away from London the telephone, cable, or wireless were always handy, and he made full use of whatever means of communication was at hand. In summer he began work at 5.30 a.m., and in winter usually an hour later. He went through the latest issues of his newspapers, made notes on what he considered to be their good and bad points, and dictated messages to those primarily concerned. His correspondence was enormous, but

letters from members of his staff were invariably answered by himself. If circumstances allowed, he would walk in St. James's Park when he was staying at his London house in Carlton Gardens, or enjoy a couple of hours of motoring should he be at Elmwood, his favourite residence. After luncheon he would sleep for an hour, and then usually return to work.

THE FAMOUS JOURNALIST'S FAVOURITE PORTRAIT



Himself an earnest disciple of hard work, Lord Northcliffe could not tolerate slackness in any member of his staff. He was, however, always considerate of the comfort of his employees, and did much to improve the standing of the journalist.

Sometimes he varied the procedure by a game of golf, but he invariably managed to get back to his study before dinner. He rarely worked after the evening meal, and was usually in bed by 9.30 p.m.

Northcliffe possessed a keen sense of humour, though he did not always choose to use it. Once he happened to go into the reporters' room when it was empty, and, sitting down at one of the desks, with his back toward the door, proceeded to make a note. One of the staff

suddenly entered and slapped the bent figure on the shoulder. "Good news, my boy," he said, "the Chief's going away, and we shall have a little rest." Northcliffe's only comment was to ask the astonished reporter to lunch.

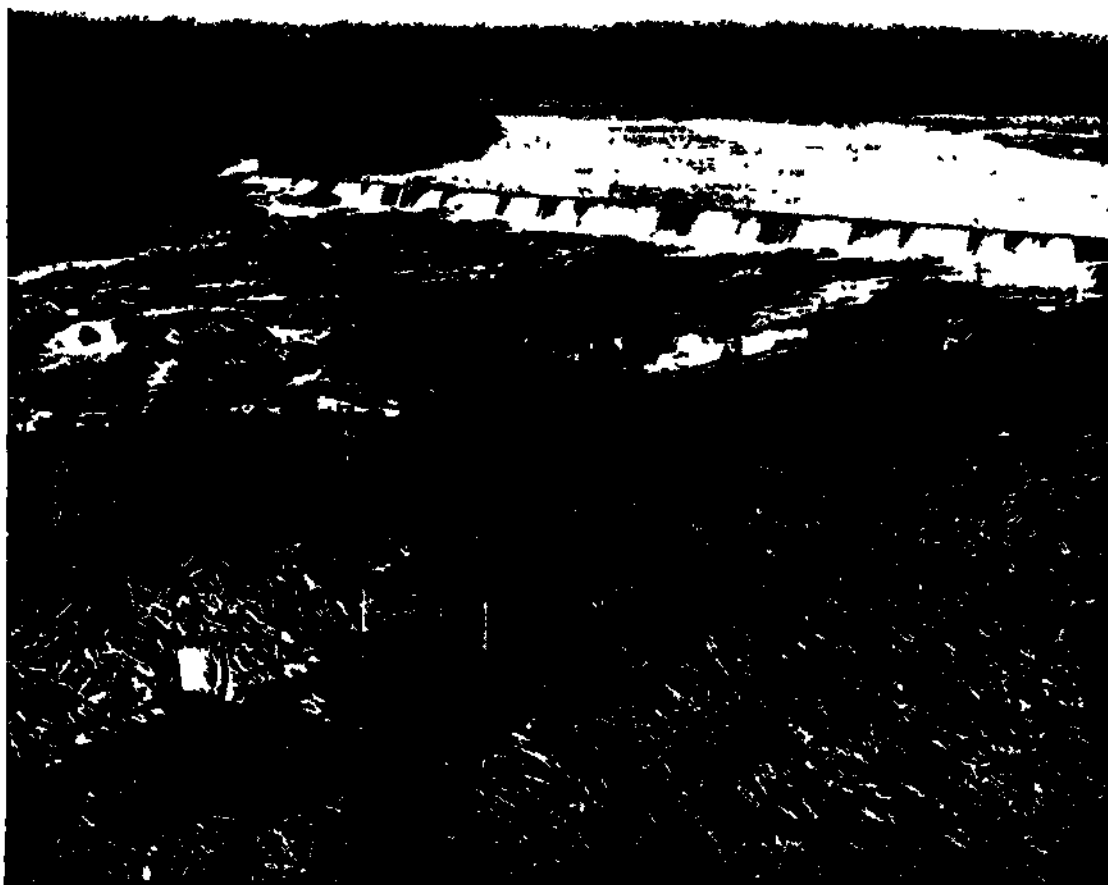
On another occasion he telegraphed to a member of the staff who happened to be away from the office to see him at 4.40 in the afternoon. Knowing the nature of the subject on which he was likely to be interrogated, the journalist prepared and committed to memory a nicely phrased speech on the subject. The oration was never delivered, for, when Lord Northcliffe opened the door to his visitor, he started on the subject of Indian famines, passed on to the practicability of schools of journalism, touched on a new publication he was about to issue, and scarcely referred to the matter

immediately on hand other than to give his decision without discussion.

In conversation the founder of the *Daily Mail* was apt to be somewhat abrupt, but he never resented being contradicted. He loved sincerity, and had a wholesome detestation of the individual who "knows it all." One of the secrets of his success was his ability to think of the subject in hand and of no other.

Northcliffe was a prodigious reader. Probably his favourite author was Dickens, the people's novelist. In the early days of *Answers* he gave particular care to the serial stories, and the plots of many of them were his own. In later years his newspaper interests naturally occupied much of his time, but he always watched the progress of his first journal in a way that was both practical and sentimental.

A BUSY SCENE AT THE GRAND FALLS PAPER MILLS



Grand Falls, a town on the Exploits River, Newfoundland, situate about twenty-two miles from its mouth, owes its origin to the development of its water-power facilities by the Anglo-Newfoundland Development Company, founded by Lord Northcliffe and Lord Rothermere, in 1906. The huge paper and pulp mills erected here are among the largest in the world.

For biographies not included in the Groups see detailed Index

STORYTELLER of the HUMAN FAMILY

How Hall Caine, the Bard of Manxland, Became a Man of Letters, and With a Story Made a Family Circle of the Nations of the Earth

"**W**HY not try your hand at a Manx story? The Bard of Manxland—it's worth while to be that."

Rossetti was speaking. He had been listening to the young critic of letters, as Hall Caine then was, narrating a strange Cumbrian legend, and his quick genius had discerned in the telling the unmistakable gifts of the storyteller.

How these two men came to be together in a remote farmhouse in the wild, mountainous country of the Vale of St. John, close by Thirlmere, is part of the story of their rare friendship. Hall Caine, suffering from an affection which frequently interrupted his severely taxed youth, had taken this house in Lakeland for a necessary rest. Rossetti, who had met the young writer some months before, and had become greatly attached to him, was also ill.

The retreat which his new friend had found appealed to him. He expressed a wish to visit it. Immediately Hall Caine, with the devotion of a son, journeyed to London, and took him back to the mountain home. During many a long evening in this old farmhouse the two friends talked of the profession of letters, and here, at the close of one of their conversations, the painter-poet determined the direction of the life-work of his companion.

Hall Caine's ambition was to become a poet and a play-writer. He was already a lecturer on literature under the auspices of the Liverpool Corporation, and a reviewer for the *Athenaeum* and *Academy*. He had tried his pen at verse, and had written sonnets which Rossetti had read, and which both the Rossetti brothers had praised. But his genius demanded another form of expression, and this Rossetti perceived.

"You may be sure," wrote the master, when criticizing an early effort at lyrical poetry, "I do not mean essential discouragement when I say that, full as 'Nell' is of reality and pathos,

your swing of arm seems to me firmer and freer in prose than in verse. You know already how high I rate your future career (short of incalculable storms of Fate), but I do think I see your field to be chiefly in the noble achievements of fervid and impassioned prose."

Whether Hall Caine was guided by Rossetti's judgment to become the Bard of Manxland, or the painter-poet simply perceived the ultimate direction and development of his genius, is

A QUIET HOUR IN THE GARDEN



Portrait of Sir Hall Caine, C.H., taken by one of his sons. Although a great traveller, he has the love of home that is characteristic of his people.

a question which Hall Caine himself might find it difficult to answer. The novelist of Manxland he became. It is his world title. It will probably remain so. By millions of readers the judgment of Rossetti is justified and confirmed.

Hall Caine, when he met Rossetti, was of such youthful appearance that it was difficult to believe he was in his twenty-sixth year. But if his limbs were frail and slender, and his complexion almost transparent, his head was fashioned in a poet's mould, and contained a hidden fire which made bright his eyes, and cast a rich glow over his hair.

Ford Madox Brown, the painter, meeting him at Rossetti's, and wanting a model for a fresco study in the town hall at Manchester, arranged that he should take the part. The painting (Hall Caine is the central figure in the third of the famous frescoes in the big hall) bears a marked resemblance to one of Severac's portraits of Keats, and it doubtless portrays the fervour and idealism of Caine's countenance as a young man in his twenties. But, naturally, the artist could not convey the charm of his conversation, and this was a particular feature of his personality. In his voice and speech, which Rossetti at all times loved to hear, there were strains of great music, deep human notes of tender pathos, sympathy, and strong appeal, which remain to this day his chief personal characteristic.

His coming to London is a page of romance. Without influence or favour, this young aspirant of letters was invited to make his home with the greatest painter-poet of the day, and was at once admitted to the inner circle of much of the best of London's literary society.

Earlier in his twenties Hall Caine had been acting as an assistant to a builder in Liverpool. He had completed his pupilship to architecture, and had narrowly escaped becoming the assistant editor of the *Builder*—a position for which he thinks he would have been quite unfit. His youth, not his ability, was the difficulty. His articles at this time were chiefly to the architectural journals. Many of them dealt

FATHER OF THE FAMOUS AUTHOR



The stalwart younger son of a small Manx crofter, Sir Hall Caine's father was a shipsmith in Liverpool, and had a severe struggle to bring up his large family.

with the justifiable outcry against the so-called "restoration" of ancient buildings, and they were of such merit that Ruskin, who, with William Morris, was leading the movement, wrote to the young journalist a warm letter of appreciation, and afterwards invited him to visit him at Coniston.

It was the news of the opening of the grave of Rossetti's wife, to recover the poems which had been buried with her seven years before, and the publication of the recovered work, that quickened the eager student's interest in the work of the man who was to become his literary guide.

About a year later the *Contemporary Review* published an article entitled "The Fleshly

School of Poetry," specially directed against Rossetti. The article had been written by a man of letters who, by some freak of chance, afterwards became Hall Caine's friend, but its injustice so fired the heart and anger of the young critic that he was compelled—as, indeed, he had always been compelled throughout his life when confronted with falsehood and inhumanity—to take up the challenge and defend the person wronged, whether he was acquainted with him or not.

Vigorous Lecture at Liverpool

At this point he did not know Rossetti personally. But few knew his poetry better, and in a lecture at the free library of Liverpool he vigorously and passionately disputed the outrageous charge. He defended the poet and his poetry by quotation and argument, proving that he was inspired by the highest spiritual emotions.

The report of the lecture brought from Rossetti a letter which was the beginning of their intimate friendship.

16 Cheyne Walk,
Chelsea.
July 29th, 1879.

DEAR MR. CAINE,—

I am much struck by the generous enthusiasm displayed in your lecture, and by the ability with which it is written. Your estimate of the impulses influencing my poetry is such as I could wish it to suggest, and this suggestion, I believe, it will always have for a true-hearted nature. You say 'hat you are grateful to me; my response is that I am grateful to you, for you have spoken up heartily and unfalteringly for the work you love.

I dare say you sometimes come to London. I should be very glad to know you, and would ask you, if you thought of calling, to give me a day's notice when to expect you, as I am not always able to see visitors without appointment. The afternoon about 5 might suit me, or else the evening about 9.30.

With all best wishes,
Yours sincerely,
D. G. ROSSETTI.

More than twelve months passed before Hall Caine knocked at the door of Queen's House, 16 Cheyne Walk, Chelsea, which, at an earlier period, the brothers Rossetti, Swinburne, and Meredith had occupied as joint tenants. The poet-painter was now the only occupant of the historic old house, approached through its huge iron gates. At night it looked dark and rather forbidding, but the poet, coming to the doorway, held out both hands in welcome, and, with a hearty "Hulloa," led the happy and rather terrified young visitor into the studio, famous as the meeting-place of numerous illustrious men of letters.

His Literary Birthplace

In this strangely shaped room, with its easels of unfinished pictures, its big bookcase, its black-oak cabinets, low easy chairs, and large sofa, like a bed (on which it was the habit

WHERE THE NOVELIST SPENT MUCH OF HIS CHILDHOOD



Long periods of Sir Hall Caine's childhood were spent with his grandmother in the Isle of Man. Her home was a tiny thatched cottage on the still unfrequented west coast. As a small boy the future novelist used to sit on the hearthstone watching the little bent old woman feeding the fire with dried gorse. (Photo: G. B. Cowen)

of the painter to recline with his feet over the back), the genius of Hall Caine was brought forth. It may be said to have been his literary birthplace; his mind's first home, with Rossetti as his godfather.

In the fellowship of the company that gathered there—William Michael and Christina Rossetti, Ford Madox Brown, Theodore Watts (later Watts-Dunton), Frederick Shields, Burne-Jones, and others—Hall Caine became conscious of his powers. He began to measure his mental abilities, exercise his energies, and sense more or less clearly his literary destiny. Both his reading and writing fell into more definite lines.

Ten Hours' Reading Daily

Up to the opening of the correspondence with Rossetti his studies had spread in a rather desultory way in nearly every conceivable direction. Sometimes he would devote as much as ten hours a day to reading, but with no better choice of books than those which were determined by chance or indicated by a passing fancy. To this hungry and quickly developing but distinctly untutored mind Rossetti brought the guidance of his mature judgment and of his rich store of general literary

knowledge. What was of no less importance to a nature like Caine's, he brought warm sympathy, generous appreciation, the atmosphere which opens the heart as well as the mind, and prepared the way for the chief of those honoured friendships which have characterized the long life of the novelist.

Home Made with Rossetti

So Rossetti took Caine to live with him when he first came up to London; gave him a room in the home of one of the leading makers of modern literature, and, in the old studio, unfolded to his eager mind the priceless treasures of his own rich, poetic imagination. Hall Caine has never failed in gratitude to the memory of his first great literary friend, although it is only fair to say that his book, "My Story," shows that in some respects the relation between them was, perhaps, one of equal give and take.

"Gabriel knew what he was doing," said William Rossetti, when the success of Caine's first Manx novel, "The Deemster," had been generally and loudly acclaimed. The novelist has put it on record that nothing that has ever been said about him has touched him more deeply.

But while Chelsea may be properly described as the literary birthplace of Hall Caine, the Isle of Man will probably claim him as one of the first of its sons. He was not actually born on the island—his birth date is the 14th May, 1853—but he is descended from a long Manx line, and before he was three months old he was taken to breathe the Manx air.

His father, the stalwart younger son of a small island crofter, was bravely struggling as a ship smith to make his way in Liverpool. Times were hard, and only by severe privation was it possible to bring up his considerable family. Partly as a consequence of this, long periods of Hall Caine's boyhood were spent with his grandmother and an uncle on the island. His father and mother were people of simple faith and sincere character, and if the material provision for their first-born was small they endowed him with a liberal heritage of vision and courage.

In his blood, as in that of most Manxmen, was also the spirit of the gipsy, inherited no

where life was very primitive. It was warmed by a large open hearth, over which hung the family "oven pot." As a small boy he used to sit on the hearthstone watching the little bent old woman in her blue homespun feeding the fire with dried gorse. While waiting for the workers returning from the fields she would sit on a low three-legged stool and charm the twilight with wondrous stories of fairies and the "little men," thus sowing in the child mind the seeds of a vivid fancy.

Influence of the Bible

She could not read, but she knew her Manx Bible by heart. Calling him "Hommy-beg"—"little Tommy" in Manx, Thomas Henry Hall being his Christian name—she would tell him of Jesus, Joseph, Jonathan, Saul, and David, until, unconsciously, the great spiritual ideals which have since expressed themselves in his writing were rooted in his soul. So much so, that it might safely be said that, although he rarely "talks religion," except to the most intimate of his friends, it would be impossible

for anyone to pass an hour in his company alone without realizing that the Bible has entered into his heart's core.

It was during his early days with his grandmother that his uncle, going to Douglas according to his weekly custom, took the boy with him over the mountain road of Snaefell, and the child's eyes were opened to the great world, with its struggling crowds of strange people, an impression which awakened in his mind an eternal wonder. Hall Caine's description of that "great adventure" is not the least interesting of his personal reminiscences.

Several years later, after schooldays (of which, in the guise of fiction, he has given some account in one of his novels), and a period of apprenticeship to architecture in Liverpool, he returned to the island to live with another uncle, a physical breakdown necessitating a change. Here, for a while, he acted temporarily as schoolmaster, but with duties beyond teaching. On the bleak headland of Kirk Maughold he was letter-writer, will-maker, and general adviser to nearly everyone in the parish, and, with the human heart laid bare before him, another step was taken in his preparation for his life's work as a teller of the human story.

AN HISTORIC OLD HOUSE BY THE THAMES



Queen's House, 16 Cheyne Walk, Chelsea, where Rossetti welcomed young Hall Caine when he first came to London and gave him a home. It was here that, at an earlier period, Swinburne and George Meredith had lived with the Rossettis.

doubt from the Viking ancestors from whom the Manx people came. It made him a traveller. There is hardly a country of the civilized world that he has not visited, nor a home of humanity that he has not studied. But love of home is as characteristic of his people as the spirit of adventure, and his novels, like his life, reflect this devotion.

His grandmother's home was a little thatched cottage on the Curragh of Ballaugh, a parish on the still unfrequented west coast of the island,

AT WORK ON ONE OF HIS WORLD-RENOWNED STORIES



Into the making of his story the novelist puts his whole strength, as the original manuscripts show. At the end of certain chapters there are exclamations of distress, sometimes of relief. What labour and agony of soul some of these scenes appear to have cost their author. No wonder they have carried his books to the farthest outposts of civilization.

By this time he was already beginning to write—apparently there was hardly any period in which he did not write after some fashion. Articles on religious and economic subjects were appearing regularly—and anonymously—in a little *Manx* newspaper. The present writer has read some of them, and can only say that they are rather startlingly and perhaps amusingly communistic. But from the standpoint of the work by which he was ultimately to become known, an account of these early efforts is less important than an appreciation of his growing knowledge of human nature.

Truths of the House of Life

As a child he had felt it in a cottage; as a youth he had found it in a schoolhouse; as a builder's assistant he had followed it as it was revealed, in ways both humorous and pathetic, in the workpeople with whom he was daily brought in contact. But the House of Life, like the House of Letters, had truths to teach him which he could not learn except by a long stay therein—until he had actually made his home in the heart of the world and shared the bitter experiences of humanity.

After the death of Rossetti this experience came. He was a journalist, a rather struggling journalist, with chambers in the old Clement's Inn, long ago taken down, and a fixed income to begin with of just a hundred a year. Poor himself, and lonely, he was on the edge of one of the poorest quarters of London—the old Clare Market. He could not leave his room without meeting the outcast, the oppressed, and the degenerate, and his work required that he should understand them. Not his work only, but his heart, compelled him to study them.

The Secrets of Humanity

As he had studied literature with Rossetti so he spelt out the secrets of humanity. It is almost as true of him as of Dickens that out of this experience (Dickens was at a place scarcely a quarter of a mile away) letters of fire burnt their truth into his mind. At least, so it would seem from the way they burn their image on the heart of the reader of the novels he wrote later. He saw, and in some degree shared, the universal tragedy of the life of the poor in the great city, and the inextinguishable grandeur of the soul in adversity.

To write out in the form of a story the truth of life he had found in the heart of humanity, and to write it with the artistry he had learned to admire when living with Rossetti, was now the desire of the journalist. He was ready for his task; he was impatient to begin his life's work; he began against serious odds.

With barely sufficient money to see him over four months he took his heart in both hands, married, resigned his journalistic appointment, and rented a little bungalow of three rooms in the Isle of Wight. Day and night he worked,

WITH RUDDY CHEEKS AND SPARKLING EYES



The high spirits of childhood could not be depicted more graphically than by this happy little group of Sir Hall Caine's grandchildren enjoying to the full the bracing delights that a hard winter affords.

"sweating drops of blood," as he said, in the labour of writing and rewriting a story which he refused to publish until it was as nearly perfect as he could then make it.

At last "The Shadow of a Crime" was completed. It was very warmly praised by the leading newspapers, but it achieved no particular popularity. It was followed by "A Son of Hagar," which was less warmly praised, and of which the author himself is the severest critic. Neither of them was a Manx romance, and neither could be called a masterpiece. They were the works of his apprenticeship, but they

were pictures, however imperfect, of homespun truth, and before long the homes of the people, like the homes of Rossetti, were thrown open to the new story-teller, who had seen "pictures in the fire" of love and suffering in the House of Life.

Manxmen have given their island Parliament the singularly suitable name of "The House of Keys," and the story of Hall Caine's life would be incomplete if it did not contain some reference to his seat there. Not that he made a prolonged stay. His temperament would not permit that. But to find him in the House of State implies that his interests were not confined to fiction, and that his stories may have a more serious purpose than is usually attributed to a novelist.

Stirred by Social Wrongs

There is statesmanship in his personality. Social wrongs and political evils stir his temper as strongly as fancy moves his imagination. But there is vision as well as enthusiasm in his outlook. He has a remarkable gift of anticipating the march of events, a fearless courage, and an untiring energy, and his best known novels, taken in relation to the dates of their production, give proof enough of this.

In the little Parliament of his island, though his sessions there were few, he contributed to the making of such changes in the constitution that certain long-practised forms of inequality, and even oppression, are no longer possible.

In the greater British Parliament he has never sought a seat, but more than one of our Prime Ministers have paid personal tribute to his political sagacity by carrying out proposals he has made to them concerning both national and international policy. During the World War his pen was writing unceasingly, with a power

which was sometimes as effective against the enemy as well-equipped battalions. The first piece of "enemy propaganda" produced in England was a letter "to the Mothers of Germany," which the Foreign Office scattered over the German lines from aeroplanes. He edited the well-known "King Albert's Book," and wrote its remarkable introduction, which was, perhaps, the first piece of international propaganda of the World War.

The League of Nations owes something to his activities, in conjunction with Viscount Cecil, at the time of its inception, and, perhaps,

THE AUTHOR'S HOSPITABLE HOME IN THE ISLE OF MAN



'Greeba Castle' stands on a wooded mountain slope almost in the centre of the island, covered with ivy up to the tower, and looking like a rock carpeted with seaweed. Across the hall, cut in an old oak beam by the novelist himself, is the familiar Shakespearean quotation, "Here shall ye see no enemy save winter and rough weather."

the first writing on the subject, both in Britain and America, was from his pen. In 1918 he was knighted in recognition of his services to the Empire and to humanity, and given the Order of Leopold by the Belgian King. In 1922 the distinction of Companion of Honour was bestowed upon him for his services to literature.

Long before this time he had won the title which Rossetti, in a moment of vision, had given him. In addition to all his political activities and his social efforts (of which little is known to the public and nothing can be said here), he had been faithfully striving after the perfection of his art. Story after story followed his first success, and with the choice of his own land for their setting he had become known all over the world as "The Manxman."

Prose Epics of Manxland

To the third of his Manx novels he gave this title. The first was entitled "The Deemster," and the second "The Bondman"—three stories, like prose epics, which with pathos and passion gripped the heart of the world. Domestic tragedy had never before been more powerfully pictured in novel form. No popular storyteller had ever dared to expose so nakedly the

innermost thoughts and feelings of human nature, or set against the overwhelming calamities of life the simple greatness of the soul. It may safely be said that these three books of themselves give him his place among world novelists.

"The Scapegoat," "The Christian," "The Eternal City," and "The White Prophet" have their setting in a wider field. They range the world from London to Morocco, and from Egypt to Rome. In "The Prodigal Son," "The Woman Thou Gavest Me," and, above all, in "The Master of Man" the novelist returned again to his native island.

Translations into Thirty Languages

But wherever the scene of the story is laid it has the same human appeal, and no more obvious evidence of its universal application can be given than the fact that his books have been translated into about thirty different languages, including Arabic. Every nation in the world has asked for his stories of home-loving men and women who have gone forth to win fortune or escape shame, and returned in dishonour or pride. The reason is simple—he speaks to the elemental passions, and these passions have no "frontiers."

Into the making of his story the novelist puts his whole strength, as the original manuscripts show. The present writer has looked over several of them. At the end of certain chapters there are exclamations of distress, sometimes of relief. What labour and agony of soul some of these scenes appear to have cost their author. No wonder they have carried his books to the farthest outposts of civilization.

When Maxim Gorki, the famous Russian novelist, visited England, and a reception was arranged for him by such men as Thomas

THE NOVELIST'S DEVOTED WIFE



Like her husband, Lady Caine is the embodiment of gracious hospitality. Theirs was a marriage of true affection, which has continued to grow deeper and deeper with the years.

Hardy, George Bernard Shaw, and H. G. Wells, he was reported in the newspapers to have said to the best-known of London librarians: "But where is your greatest writer—Hall Caine?"

Probably no British author is more widely known in many countries, or receives such a huge mail-bag of foreign correspondence, as this story-teller of the little island in the Irish Sea.

For nearly forty years the Isle of Man has been the permanent home of Sir Hall Caine. He returned to it when he determined to follow Rossetti's lead, and become the Manx story-teller of the British people, little dreaming that with a story he would draw the nations of the world in a family circle round his island home.

As a well-known statesman said, "He put the Isle of Man on the map."

He who had known many homes, who had been the guest of kings and knaves, presidents and peasants, scholars and sinners, when he made himself a home, made it out of an old guest-house, and fashioned and furnished it as a house of friendship.

Ivy Clad "Greeba Castle"

"Greeba Castle" stands on a wooded mountain slope almost in the centre of the island. It is covered with ivy up to the tower, and looks like a rock carpeted with seaweed. Across the hall, cut in an old oak beam by the novelist himself, is the familiar Shakespearean quotation, "Here shall ye see no enemy save winter and rough weather." And in the big dining-room are two wide fireplaces (one of them from George Eliot's home) that none may sit away from the hearth. In the novelist's own room is the desk Dickens used at the office of *Household Words*, and the Stratford bust of Shakespeare which used to stand over the bookcase in Rossetti's studio.

Such is the spirit of "Greeba." Here, while writing his best-known books, Hall Caine lived with his wife, like himself in gracious hospitality, and his two sons, who have inherited, and are in different ways working out, their father's social sympathies.

Early in 1923 he had a dream. It arose from his horror of war and his hopes of peace. It became a story of two lives broken to pieces because they could not find a corner of the earth on which they could make a home for love. "The Woman of Knockaloe" was written for the healing of the families wounded by the World War. Did the world heed it?

Faith in Doctrine of Atonement

Such has been the making of one of the most arresting of modern novelists, and if it is necessary to indicate the central cause of his wide appeal to people of all races, it may be said to lie in his faith in the doctrine of atonement. That no man is lost until his soul is lost, that however low a man may have fallen there is salvation for him as long as there is life—this is the heart and soul of his message to humanity, and what has carried his books so far. Whatever else may be said of him in praise or blame no one who really knows him or his work will question that.

And now in his old homestead, with a reading circle of home-lovers drawn from all the nations of the world around him, he, who knows what home means and what humanity is seeking, is writing in the universal language of the heart the immortal story of Him who came to take the whole human family to the Everlasting Home of the Father.

The SAILOR KING of BRITAIN

King George V, Who by Devotion to the Manifold Duties of Kingship Has Won the Regard of the Nations and the Love of His Subjects

TORPEDO Boat No. 79 had been ordered to Spithead, and its recently appointed commander was in a great state of excitement. Just as he was making final arrangements, however, he received an urgent message from his father, the Prince of Wales. It was to say that his mother was very anxious to see him and hoped that his duties would permit him to attend the Goodwood Races.

The admiral of the fleet, who had also received a message, sent for Prince George and smilingly granted him two days' leave.

"But what is to become of my boat while I'm away?" anxiously inquired the young commander.

"No doubt something can be done," observed the admiral, with a twinkle in his eye.

"That won't do at all," said Prince George. "My orders are to take my boat to Spithead, and to Spithead I must go. I'll make it right with my mother."

It is harder for a prince of royal blood to refuse a privilege than for an ordinary person, for all the world likes to think of a prince as a naturally privileged person. Prince George, however, considered himself at the time of the

above incident to be primarily a naval officer. His job came first, and the fact that he was the son of the heir to the throne was a private matter. Later on, when the exercise of princely prerogatives became his duty, he showed himself equally punctilious.

Had Prince George been born a commoner he would probably have chosen the life of a sailor, for he loved the sea and revelled in every detail of nautical science. "What, was that Prince

George?" demanded an American visitor on board H.M.S. *Halifax* who had been shown round during coaling operations by a grimy looking young officer; "no wonder he laughed so heartily when I asked him if they kept his

AT THE DAWN OF HIS NAVAL CAREER



King George began his naval career as a cadet on board the *Britannia*. He learnt everything, from the handling of boats to the most intricate problems of seamanship.

Royal Highness in cotton-wool while the coal dust was flying about!"

While in charge of Torpedo Boat No. 79, Prince George once had to carry out a very dangerous operation. Another torpedo boat had got into serious difficulties owing to a broken screw, and was rapidly drifting on to a lee shore. Prince George was sent to the rescue, and, in spite of a high-running sea and a stiff gale, successfully steered his boat to the spot, attached a steel hawser to the disabled boat, and towed her back to safety.

"The Sailor King," as he is rightly and popularly called, is the second son of the late King Edward VII and Queen Alexandra, and was born at Marlborough House, London, on the 3rd June, 1865. When two years and five months old he showed himself to be possessed of a strong will and considerable liveliness. The court photographer had to pay no less than five visits before his young Royal

Highness could be persuaded to sit, and even then he refused to face the camera without a favourite dog.

As a very small boy, Prince George laid the foundation of that thoroughness and conscientiousness of disposition in regard to studies which have enabled him, throughout his career as prince and king, to keep a close grip upon public affairs. It is well known that his Majesty is a most diligent student of State

documents, and that when he first came to the throne he had to be persuaded to delegate some of this fatiguing work to officials, for fear he should overstrain his eyes in the constant reading of intricate matter.

His first tutor was the Rev. John Neale Dalton, curate of Sandringham, who developed in his pupil those powers of observation and memory and literary style which enabled the latter, during the early days of his world travels, to record his adventures and sightseeing in a graphic manner. The narrative, entitled "The Cruise of H.M.S. *Bacchante*," which also con-

KING GEORGE AS A YOUNG MAN



Having lived the arduous life of the heir-apparent for six years, our sailor prince returned to the sea in 1898, when he took charge of H.M.S. *Crescent* for three months.

tains contributions by the Duke of Clarence, the king's elder brother, was published in 1886.

Prince George's imagination was easily aroused by stories of adventure in strange lands. "He would spend hours in my room," said Professor Vambéry, the oriental scholar and traveller, whom King Edward invited to Windsor, "literally hanging on my words and begging for just one more story. He was constantly there to see that I had everything; and one day, seeing that I had no hot water, he ran and fetched it himself." For this, the prince was dubbed "the Royal Jug-bearer."

When he was twelve and his elder brother fourteen, the two boys began their naval career as cadets on board the *Britannia* under the tutorship of Mr. Lawless, one of the most able naval instructors of the time.

The young princes were taught everything, from the handling of boats to the most intricate problems of seamanship. They were treated exactly the same as the other cadets, with the exception that they had a cabin to themselves.

An amusing episode occurred one day when the royal brothers were staying at Abergeldie. They had lost their way on a fishing excursion, and had to hire a trap to take them home.

An Inquisitive Driver

The driver of the trap was a lad who came from a distant part of Scotland, and he did not recognize his distinguished "fares." "Wha may you chaps be?" he inquired as they jogged along the road.

"I am Prince Albert Victor," said the elder brother.

"Humph!" said the lad, and, after a moment's reflection. "And wha is t'other chap?"

"Prince George," was the reply, "and the Prince of Wales is our father."

"And maybe Queen Victoria's your grandmother?" retorted the lad.

"Yes, she is," replied the princes.

After a long stare the lad said, "Perhaps you'd like to know/who I am?"

"Yes, we would," said the princes.

"Well, then," said the lad, determined not to be outdone, "I'm the Shah of Persia!"

On joining the *Bacchante*, a steam corvette commanded by Lord Charles Scott, in 1879, the brothers were rated as midshipmen. In common with the other young "reefers" they roughed all weathers, and endured the hardships of many different climates. The *Bacchante* visited the West Indies, South America, the Cape, Australia, Fiji, Japan, China, Singapore, Ceylon, the Suez Canal, Egypt, the Holy Land, and Greece. Thus, at fourteen, the midshipman and future king had seen a considerable part of the world. "I have seen most parts of the world," his Majesty once observed, "and I really think we have all the best there is. I don't know exactly what 'Little Englander' means—there seems to be a good deal of doubt as to his creed—but if he believes that the British Empire is large enough, I think I must plead guilty to being a Little Englander myself."

Made a Sub-lieutenant

After a short stay in Switzerland, Prince George was appointed midshipman on board the *Canada*, and visited the North American and West Indian stations. As a result of independent prowess on the voyage, he passed as a sub-lieutenant, obtaining a first class in seamanship on his nineteenth birthday.

Then followed a course of training at the Royal Naval College, Greenwich, where the prince achieved the distinction of getting a

first class in four subjects—navigation, torpedo, gunnery and pilotage. With his appointment, in 1886, as regular lieutenant on board H.M.S. *Dreadnought*, and thence to H.M.S. *Alexandra*, the flagship of the Duke of Edinburgh, it was considered that his naval education had been completed.

But the prince thought differently. Full of ambition, and justly proud of his rapid rise to positions of responsibility, he begged hard to be allowed to continue in the service. Here, indeed, was a real privilege, for the lives of princes are usually chosen for them, but the request was granted.

For thirteen months Prince George held command of the *Thrush*, a gunboat of 805 tons and 1,200 horsepower, cruising in the West Indies and taking part in important manoeuvres. In 1891, when he was twenty-seven years old, he was gazetted commander, and given charge of the second-class cruiser H.M.S. *Melampus*.

Death of the Duke of Clarence

His naval career was then interrupted by the death of the Duke of Clarence, which imposed upon him the duties and responsibilities of heir to the throne. For six years he lived the arduous life of the heir-apparent with its multifarious social duties, but his hankering after the sea was again gratified in 1898 when he took charge of H.M.S. *Crescent* for three months.

Not for nothing did Admiral Fisher consider King George to be one of the best-informed sailors in Europe, and although the course of events necessarily obliged longer and longer absences from the sea, the British Admiralty showed their appreciation of the sailor prince's great services by appointing him rear-admiral in 1901 and vice-admiral in 1903.

On the 6th July, 1893, Prince George married Princess Victoria Mary

Princess May, as she was usually called—only daughter of the Duke and Duchess of Teck. The alliance was extremely popular from every point of view. The young couple were lovers, and not only had the new princess been brought up in the best English traditions, but her mother had endeared herself to the people of this country by her stout adherence to its interests.

"I would rather be a princess of England than have any other title in the whole world,"

the princess once said, and she refused the crown of an empress rather than leave the land in which she was born.

Princess May had spent her childhood in the old Palace of Kensington, and was actually born in the nursery of that establishment. "I am surprised at you for being born in the nursery," said Prince George when the young couple

Full of

THE EMPEROR OF INDIA AS A MILITARY CHIEF



King George, Emperor of India, in the uniform of colonel-in-chief of King George's Own Lancers (Indian Army), one of the most magnificent of the king-emperor's many uniforms.

visited the palace together, shortly after their marriage. "But I could not help it," jocularly replied the princess.

In another old royal residence, White Lodge, Richmond Park, the princess, after finishing her education in Florence, lived with her mother, assisting in the philanthropic work which had made the duchess's name a household word, and

For biographies not included in the Groups see detailed Index

thus laying the foundation for her own good works as princess, queen, and woman.

"It is impossible to feel shy of the princess," said one who often met her; "she is so natural herself." It was at her special request that the young couple lived as quietly as possible during the first years of their married life. The Duke and Duchess of York, as they then were, took but a small part in State functions. The duke held an occasional levee at St. James's Palace, but the duchess was rarely seen in drawing-rooms.

After the birth of Edward Albert, now Prince of Wales, at White Lodge on the 23rd June, 1894, the family life was spent largely at York Cottage, Sandringham, which, with its beautiful garden and country surroundings, formed an ideal spot for domestic happiness. The five other children of the duke and duchess were born here during the next eleven years.

With the opening of a new century, the death of Queen Victoria, and the accession of King Edward, the idyllic serenity of the duke and duchess's life was necessarily disturbed by changes that affected them vitally. The duke had now to assist his father, and the horizon of his public activities widened.

Not all of the new duties now to be undertaken could be faced with the same degree of equanimity, particularly that which entailed upon the young parents a journey of 50,000 miles away from their children and the home life which they so greatly loved.

One of the last wishes of Queen Victoria had been that a member of the royal family should visit Australia, in order to recognize the new Commonwealth. After her death, King Edward lost no time in seeing that the wish was carried out, and, on the 16th March, 1901, the Duke and Duchess of York sailed from London on board the *Ophir*. The tour was an historic one, for it was the first time that an English prince and his wife had travelled together so far from their country.

IN HIGHLAND DRESS



King George has a very warm spot in his heart for his northern subjects, and the picturesque Highland dress becomes him admirably.

It is no secret that the young duchess regarded the voyage with mixed feelings. While she looked forward with pleasure to the change of scene and the excitement of travel, she inwardly dreaded the long separation from her children. When she was asked for instructions as to the preparation of her cabin on board the *Ophir*, she replied without hesitation, "Just make it like my room at York House."

At the last moment, when the vessel slipped its moorings amidst the cheers and heartfelt good wishes of the crowd, the duchess was not on deck. She had retired to her cabin, there, no doubt, to meditate upon the severe side of the ordeal which was to separate her from her children for so long.

After a trying voyage the *Ophir* reached Australia on the 1st May, and the duke and duchess drove through seven miles of decorated streets lined with enthusiastically loyal crowds.

"Unity and solidarity of the king's dominions" was the keynote of the duke's many inspired utterances. He proved himself to be not merely a figure-head but a living force, anxious and watchful for the best interests of the Empire. His speeches throughout the tour were marked by extraordinary tact and wisdom, and showed him to be the right man in the right place.

Many amusing incidents occurred during the voyage. At the duke's request, he and his suite followed the time-honoured custom, in crossing the Line, of being lathered and shaved and toppled over into a tank. When it came to the ladies a less trying

ordeal was substituted. An old sea-dog, dressed as Father Neptune and carrying a silver bowl, approached the duchess and inquired whether she was willing to be christened.

The duchess agreed, but the old sea-dog seemed suddenly smitten with shyness. He offered the baptismal bowl to the duke, who, however, merely remarked, "Oh, do it yourself." Whereupon, Father Neptune screwed up

his courage and lightly touched the duchess on the forehead with his finger, having first wetted it in the bowl.

The simple, homely nature of the duchess is well illustrated by the following story. It was the custom on board the *Ophir* for some of the officers to dine with their Royal Highnesses each night. Some of the rougher kind dreaded the ordeal, and, one in particular, a Scotsman, frankly implored the captain to excuse him when it came to his turn to make one of the party.

But there was no escape, and, to make matters worse, the Scotsman was told that he would have to sit next to the duchess. In his own words, "he nearly dropped through the ship" when he heard that this was the arrangement.

The duchess, however, soon found out how to put her companion at ease. "I found myself," he said afterwards, "telling her all about my home in Glasgow, my wife and children, their illnesses, our servant troubles, and everything else! And on one or two occasions during the voyage the princess, with a smile, referred to my children by name."

Into the Bush

While in Australia, the royal party penetrated into the bush and drank "billy" tea and ate "dampers" with squatters. At Adelaide University, the honorary degree of Doctor of Laws was conferred upon the duke, while the students sang a ballad specially devised for the occasion. One of the verses read as follows:

The duke will get an LL.D.,
An honour well deserved; and we
Had we our way, would here to-day
Another give to Princess May.

The *Ophir* returned by way of Canada, where there were more novel experiences for the royal travellers, including lunch in a lumberman's log hut, a voyage in a birch-bark canoe, a ride on the cow-catcher of an engine, and a reception by the famous Blackfoot Indians, who squatted around in their usual style and smoked pipes of peace.

That the tour, originally planned as a

necessary function of the Empire, proved of incalculable benefit to the welfare of all the English-speaking races was largely due to the enterprise of the duke and duchess, who made every prearranged item of the programme the occasion for a personal triumph reflecting the real feelings of the mother country towards her far-flung colonies.

Upon the return of the wanderers, the

REIGNING IN THE HEARTS OF THEIR PEOPLE



Their Majesties have gone out of their way to become familiar with the life of their people. They have visited the meanest slums, and they pay as much attention to the remarks of the dockerman as to those of the cabinet minister. (Photo: Vandy.)

happiest of reunions took place between them and their children. The duchess, it is said, stamped her feet with impatience when, owing to a slight hitch in the arrangements at Portsmouth, there was some delay in the approach of the *Victoria* and *Albert* bearing the royal children on board.

The duke, who now became Prince of Wales, soon gave signal evidence of the fact that this, the most important of his tours, had broadened his mind and developed his remarkable powers as a speaker. At the Guildhall banquet given in honour of the home-coming, he startled his listeners by the originality and outspoken

character of his utterances. On this occasion he delivered his now famous exhortation, "Wake up, England," and he concluded his speech by a noble peroration which is probably one of the best and most spirited of his many public sayings.

No one who had had the privilege of enjoying the experience which we had during our tour could fail to be struck with one prevailing and pressing demand—the want of population. Even in the oldest of our colonies there were abundant signs of this want. There are great tracts of country still unexplored, hidden wealth calling for development, vast tracks of virgin soil ready to yield profitable returns to settlers, and all this can be enjoyed under conditions of healthy life, liberal laws, and free institutions in exchange for the overcrowded cities and almost hopeless struggle for existence which alas! too often is the lot of many in this country. But one condition and one only is made by our colonial brethren and that is "send us suitable emigrants." I would go farther and appeal to my fellow countrymen at home to prove the strength of the attachment of the Motherland to her children by sending them only of her best. By these means we may still further strengthen—or, at all events, pass on unimpaired—that pride of race that community of purpose that feeling of common loyalty and obligation which knit together and alone can maintain the integrity of our Empire.

Occupied with Home Duties

For the next few years, with the exception of the Indian and Canadian tours, the Prince of Wales was mainly occupied with ceremonial duties at home. Apart from these functions he did not often appear in public and he was far less in the limelight than has been his son, the present Prince of Wales, or than was his father throughout his career.

In private life he favoured the mode of existence of an English country gentleman, taking a keen interest in all forms of sport, especially shooting in which he excels, being generally regarded as one of the best shots in the country, and sometimes, as in the case of Rugby football, giving a filip of popularity to a game threatened with declining interest on the part of the general public.

It is not at all surprising that when the untimely death of King Edward VII on the 6th May, 1910, led to King George's accession, the latter was not at first regarded as a monarch who would rule by the force of personality, although it was known that he had pronounced views on the nature of his new task, and that he possessed the will to use his valuable experience and great powers of discrimination and common sense.

His Personal Characteristics

He was, in fact, a man of very different temperament from his father, more studious and reserved, and more fixed and conservative in his fundamental view of life, although flexible enough in his wiser progressive opinions with regard to certain necessary changes in the constitution.

It is not for nothing that the King of England, during a period when many new forces were coming into play, some of them menacing to the Victorian and Edwardian scheme of things, chose to be less a romantic figure than an interesting, practical, highly principled and hard working leader of affairs. History will probably have to record that during the Georgian era the King of England spoke less and thought more, was less in evidence yet more appreciated, than at any time in the history of the country.

An Interesting Incident

A delightful incident illustrates the personality of King George, of whom it may be said that no monarch has ever been less avid for the glory that attaches to kingship. A French nursemaid walking with her charge, a little girl, in Hyde Park, heard that the king was out riding, and drew near to a spot which, probably, he would pass.

Presently his Majesty came along, and the nursemaid shouted "Vive le Roi." Somewhat to her discomfiture the king reined in his horse, turned, and cantered back.

"I should like to thank the person who called out 'Vive le Roi,'" he said.

"Monsieur is very polite," said the nursemaid. "I was very pleased to see monsieur go by, but, now you speak to me, that is better still."

"This is the first time," replied the king, speaking in French, "I have ever heard 'Vive le Roi' said to me. It is a pleasure my father often had." His Majesty then asked the nursemaid how long she had lived in London, whether she liked it, and what department in France she came from. On being told by the nursemaid that she would like London better if it rained less, his Majesty laughed heartily. "Well, mademoiselle," he concluded, "summon up courage to learn our language. We are very fond of the French. Good bye."

"Polite to All, Intimate with None"

It has been said of King George that he is "polite to all and intimate with none." As a result of this recognized trait in his character he came to the throne singularly free from those social entanglements which have hampered so many well meaning monarchs in their desire to please all and at the same time be fair to all.

King Edward VII's noted friendships with Delcassé, Clemenceau, and more especially Loubet, had produced valuable results; but a king who makes friends for himself makes friends for his country, and may equally make enemies. The wisdom of King Edward saved him from this, but his son took no risks at all. He started his reign with a clean sheet, owning no preferences and displaying few prejudices.

THE KING-EMPEROR ENTERING DELHI THROUGH THE DELHI GATE



A magnificent State ceremony was witnessed in 1911 at the Delhi Durbar, when George V was proclaimed Emperor of India. King George, wearing a field-marshal's uniform, with the ribbon of the Star of India, and mounted on a splendid charger is here seen riding through the gate of the fort, the historic point of entry into the city.

In his private relationships with his family, King George revealed the hereditary influence of his grandmother, Queen Victoria. Although not a stern parent, he dealt firmly with his children. "You need not think that being my son makes any difference," he told Prince Edward, whom he thought was not applying himself sufficiently to his studies. "You must pass your examinations like any other boy, or you will try again and again until you do."

A Box of Turkish Delight

On another occasion the royal children, who were only rarely allowed to receive presents, had been given a box of Turkish delight. These were taken care of by their tutor, who handed out one piece every night. Prince Albert, however, having been entrusted with a lump intended for his brother, yielded to temptation and nibbled a piece off before giving it to the rightful owner.

When the truth came out Prince Albert was punished by having to eat the partly nibbled piece as his next night's portion. But when the king heard of the incident he considered that the young prince should be taught a sharper lesson, and ordered that he should go without sweetmeats for a week.

When his Majesty, at his own express wish, joined his armies in the field during the World War, he was the first English king to do so since 1743, a fact which is of more striking significance than appears on the surface, for it marked the final end of a tradition which aimed to keep the king entrenched behind barriers of officialdom and confined within the limited precincts of the Court.

No one has done more to break with this unwholesome tradition than King George himself. Both their Majesties have gone out of their way to become familiar with the life of their people, not flinching from visiting the meanest slum in order to learn the hard truths revealed there, and paying as much attention to the remarks of the dockers as to those addressed to them by a cabinet minister.

The Queen's Love of Children

In particular, as is well known, her Majesty loves all children. During a visit to the garden suburb at Becontree, near Ilford, it was arranged that a nine-days-old baby and its mother should be presented to her Majesty. After the visit the royal party passed along the street of humble dwellings, and the queen, noticing a nurse standing in a doorway,

insisted upon being taken upstairs to see the still more recent arrival.

King George took a strong lead in the matter of the housing problem, calling a conference at Buckingham Palace and impressing upon the members of the commission the vital importance of their mission from the national point of view.

"If this country," his Majesty pointed out, "is to be the country which we desire to see it become, a great offensive must be undertaken against disease and crime, and the first point at which the attack must be delivered is the unhealthy, ugly, overcrowded house in the mean street, which we all of us know too well."

A BELOVED LEADER OF AFFAIRS



History will probably have to record that during the Georgian era the king was less in evidence yet more appreciated than at any time in the history of the country. (Photo: Hoppé)

Nor do their Majesties forget the lighter side in these excursions among their people. Perhaps the prettiest incident of recent times was provided by a visit to the Great Western Railway Works at Swindon, in 1924. It had been arranged that the king should drive the company's most recent triumph in locomotive engineering, *The Windsor Castle*.

The event might easily have passed off unimpressively. A touch of imagination was necessary in order to give it a human appeal, and the king readily supplied it. So infectious

was his hearty appreciation of the situation, that the queen decided at the last moment to join her husband in the driver's cab.

Both laughing excitedly, and wiping their hands on oil-rags, their Majesties awaited for the signal to start.

"The signal is down," said the queen, who had been peering through the cab window.

"Wait for the right-away," replied the king. The guard shouted and waved his flag. The king blew a shrill blast on the whistle, pulled the regulator down, and started the monster engine on its journey. At its conclusion he applied the brakes, and, turning to the driver, smilingly inquired if he were not an apt pupil.

The Moral of the Story

A simple story, but one with a very wholesome moral, which is, not so much that kings and queens no longer mind being soiled with oil-rags, but that they have the courage and the common sense to enter into the spirit of their people, and to learn from practical experience exactly how they live and work.

"The king," said a noted newspaper proprietor, "holds his job because he knows it. He has a mind that is fairly encyclopædic. He can talk more intelligently for three minutes on any given subject than any man I know."

It is easy to forget that a king has a job to do, and it is only necessary to go back a few years in our history in order to realize the tremendously added responsibilities and downright difficult tasks of modern kingship. Not only are there certain State affairs which only the king can deal with, and decisions to be arrived at in which no cabinet minister or secretary can guide or assist him, but there are important psychological matters which have to be deliberated by the occupant of the throne.

An American's Opinion

An American writer, puzzled by the discovery that in England facts change but forms never change, put the situation of the British monarchy in a nutshell, although he failed to arrive at the kernel of the truth.

"There must be," he wrote, "something more potent than a desire to be courteous to pleasant people that persuades the leaders of the great Labour Party to put on their smart clothes and silk stockings to dine with the king at Buckingham Palace; that leads overburdened shopkeepers and underpaid clerks, and labourers without jobs, to fight for places where they can wait proudly for a night and day to catch a distant glimpse of an English princess's marriage cortège."

There is. It is respect and admiration for a man who does his job, and does not expect to be let off lightly because the job happens to be that of the first gentleman in the land.

GUARDIANS of the BRITISH EMPIRE

The Illustrious Exploits of French, Haig, Allenby, and Maude on the Field of Battle, that Helped to Shatter the German Dream of World Dominion

BETWEEN the British forces and the town of Barberton, occupied by the Boers, there was a rocky mountain, generally considered to be impassable for military purposes. At least, the Boer generals regarded it as such.

General French thought differently. He did not blink the facts, but he refused to allow his mind to dwell too long upon those that seemed to make his proposed manoeuvre theoretically impossible. The pathway was narrow and the gradient one in four. There were rocks and chasms, awkward twists and turns. At the top there might be unexpected danger.

It was a question of moving an army with all its equipment up the side of a mountain. Success would mean a new position, from which it might be possible to sweep down upon the unsuspecting Boers, comfortably ensconced within the town. General French remembered the words chalked up on the walls of farmhouses by the Boers:

Why are we bound to win? Because, although we have only 90,000 burghers, that means 90,000 generals; but the British, though they have 200,000 soldiers, have only one general—and he is French.

An order was given. The army moved forward and upward in a long winding procession. The men crawled, the horses stumbled and struggled for foothold, the oxen panted as they dragged the heavy guns up the awful incline, but neither man nor beast failed. The summit was reached without the loss of a life.

General French swept the valley with his glasses. He saw the town lying quietly in a hollow. There were no preparations for defence. The Boers simply did not believe it

possible that they could be attacked from the mountains. It was a question of descending rapidly, before the enemy knew of their danger.

After a short breathing space, another order was given. Down the mountain side went the whole cavalcade, with the exception of the baggage teams, the cavalry men leading their horses, which half scrambled, half slid, down

the declivity on their haunches; the artillery men holding on with ropes to the guns, as they rolled recklessly down the slippery incline.

The Boers, six hundred strong, escaped from one end of the town as General French and his advance guard entered the other. The gallant commander had achieved, perhaps, the most remarkable feat of the campaign and added one more triumph to the series of dashing cavalry raids with which he made his name.

Small wonder that the Boers soon learned to respect the man at whose name they had giped. Even the redoubtable De Wet feared French. When asked which one of the English generals was most likely to catch him, he observed that of those mentioned one would take all eternity to run him to earth, another two years, while French would get him in about two weeks.

Yet French was not considered a likely man before he got his great chance during the Boer War. A few years before, he had actually been put on half-pay. Nobody thought that he would be heard of again.

But French knew. "If I don't end my days as a field-marshal," he told his messmates in his subaltern days, "it won't be for want of trying, and—well, I'm jolly well going to do it."

THE FIRST EARL OF YPRES



It was French who led the Expeditionary Force, who bore the brunt of the first German attacks, and who first urged the importance of rapid shell production.

He was born at Ripple, near Walmer, in Kent, on the 28th September, 1852, of Irish parents, with just a dash of French blood in his composition, which perhaps accounts for the logical precision with which he carried out the most impetuous actions. Roscommon, the home of his ancestors for many generations, saw little of him during boyhood, for he spent most of that period of his life far from Ireland, in a north London suburb.

His Admiration of Napoleon

Like most other boys, French played with tin soldiers, but, unlike the majority, he devoured even the most abstruse text-books on war from a very early age. Napoleon was the hero who quickly swamped all others in his boyish imagination. Even in late life this hero-worship remained as a deeply rooted influence. His most characteristic pose was Napoleonic—with legs astride and arms either folded across his chest or clasped behind his back.

He spent four years at sea as a midshipman, entering the *Britannia* at fourteen, before joining the 8th Hussars. He soon transferred to the 19th regiment, known as "The Dumpies" from the shortness of the men composing it, and became a captain in 1880.

French nursed his ambition to become a cavalry leader with a full recognition of the anomalies and disadvantages of that position in modern warfare. "A cavalry leader," he once remarked, "must not be thin-skinned. All the time he is being watched by two rival arms, infantry and artillery, one at least of which is saying 'idiot' under its breath most of the time."

A Dashing Cavalry Leader

"Soda-water bottle" French, as he was nicknamed owing to his peculiar, although very efficient, mode of horsemanship, first won his spurs in action during the arduous Sudan campaign of 1884-85. He quickly established a reputation for energetic and dashing cavalry work. Superior officers referred to him as the captain who "rides about at a gallop until his staff gradually tails off." On his return to England he was specially commended by Sir Redvers Buller and gazetted colonel.

In spite of his splendid work, the War Office overlooked him, and he was so depressed by this lack of recognition that at one time he seriously contemplated retiring from the service. From this course he was fortunately dissuaded by some of his fellow officers, who knew that his great abilities would one day be fully employed.

French's dashing exploits at Elandslaagte, Kimberley, and elsewhere during the Boer War soon proved him to be one of the greatest of

cavalry commanders. "I promise," he told Lord Roberts, "to relieve Kimberley at six o'clock on the evening of the 15th, if I am alive." The prophecy was fulfilled.

One amazing feat after another startled the Boers and forced them into submission. With a corps reduced from 5,000 to 2,000 owing to the blunders of other commanders, French led the dash that cut off Cronje's escape. The wily Boer leader found himself shut up in a river bed at Paardeberg, and was obliged to surrender.

French's name was now a household word, but he showed himself quite unspoiled by fame. One afternoon, during a lull in the campaign, a war correspondent galloped into the British camp, and, seeing an elderly soldier seated under a haystack without a jacket and smoking a pipe, inquired where he could find the general. "Oh, I believe the old man's somewhere around," said the soldier. "Well, just hold my horse for me while I look around," said the correspondent. The soldier did so, and the correspondent approached a staff officer and repeated his inquiry for General French. "Why, that's him," said the staff officer, "holding your horse."

Not Always Easy-going

On occasion, however, French could show himself far from easy-going. A colonel once sent a message to the effect that he was in serious difficulties and inquiring whether he should surrender. "I am sending another colonel," French replied.

Great deeds are sometimes soon forgotten, and French's position in the service in 1914 was not one that gave rise to a general belief that he would be selected to command the British army in the event of war. He had succeeded Sir William Nicholson as chief of the Imperial General staff in 1912, and a year later he fulfilled his youthful ambition by becoming a field-marshal. Early in 1914, however, he resigned owing to his disagreement with the Government's Irish policy. Once more his career seemed over without having reached a climax in any way worthy of his highest powers.

Brilliant Work in the World War

Then, at the beginning of the World War, in August, 1914, it fell to his lot to extricate the "Contemptibles" from the Mons débacle and to stave off the desperate German offensives at Ypres and again at Festubert in 1915. On these three occasions, when the least error of judgment would have let the Hun hordes into Paris, French made no mistake.

It was French who first urged the importance of rapid shell production and "the necessity for the organization of the nation's



FRENCH AND JOFFRE ON THE BATTLEFIELD IN FRANCE



Before the first battle of the Marne French urged the British army "to show now to the enemy its power and to push on vigorously to the attack." Joffre, too, had issued a stirring order "Advance as long as you can. When you can no longer advance, hold your position. When you can no longer hold it, die."

industrial resources upon a stupendous scale." Having borne the full brunt of the first German attacks and laid the foundation of the mightiest military organization that England has ever put into the field, General French surrendered his command to Sir Douglas Haig on the 15th December, 1915.

He was created Viscount French of Ypres and High Lake, Roscommon, in 1916, and first Earl of Ypres in 1921. He commanded the British forces at home until 1918, and was lord-lieutenant of Ireland from 1918 to 1921.

Pigeon-holed at the War Office

England knew but little about her potential military heroes before the days of the World War. Names like Haig, Allenby, and Maude were comparatively unknown to the general public. These men, together with many others, were pigeon-holed at the War Office for special service in the hour of need. They had proved their worth in the little outpost wars, but it was not until they were called upon to guard the Empire from the greatest military assault of modern times that they showed their real quality.

Like his predecessor and intimate friend and associate in many stirring engagements,

Sir Douglas Haig gained his reputation as a cavalry leader. He was born on the 19th June, 1861, in a Fifeshire village, the youngest son of an ancient family of that county with fighting records dating back to the days of Bruce and Wallace.

Colour-blindness postponed Haig's entrance into the army after his Oxford and Sandhurst days, but he was determined not to allow this small, although serious, defect to thwart his military ambition. He carried his case to every official of importance at the War Office, and finally it was the personal influence of the commander-in-chief that enabled him to commence his career in 1885 as an officer in the 7th Hussars.

Early Fighting in Egypt

His early fighting experiences were very similar to those of French, with the exception that the younger officer had better luck. He helped Lord Kitchener to avenge Gordon at Atbara and Khartum, and became a brevet-major after only thirteen years of soldiering.

During this campaign he displayed a fearlessness which amazed the veterans of a brigade noted for daring feats. On one occasion it became necessary to investigate a distant

object on the desert, which might have been a zareba—the Sudanese term for an encampment—concealing swarms of blacks. Glasses failed to bring the object near enough, and Haig volunteered to ride out and examine it.

Haig soon realized that the object was a zareba, for, as he approached, a storm of bullets assailed him. Nothing daunted, he drew nearer still, until he was within a hundred yards of the encampment. He made a leisurely survey of its arrangements, noted the probable force of the enemy, and returned unhurt.

EARL HAIG OF BEMERSYDE



"Leave it to Haig; he's there," was a dictum frequently on the lips of Sir John French during the terrible autumn of 1914, when our army was struggling to hold its own.

"It was," said an officer who witnessed it, "the most astounding exhibition of cool cheek and nerve I have ever seen. Not one of us ever expected Haig to return alive."

As colonel of the 17th Lancers, "the Death or Glory boys," Haig still further distinguished himself during the Boer war. He was General French's right-hand man, and once saved his chief's life.

The incident took place on the day of Cronje's surrender. The British army was crossing the swollen and swift-rushing Modder River, on the way to Paardeberg. Suddenly the general's

horse reared and threw him into the river. Haig dashed to the rescue, but his horse tripped and he, too, fell into the torrential waters. Both men were in serious danger, but the general's plight was worse, for he had become entangled in his horse's harness. Haig extricated him and they both swam to shore.

"I was commander-in-chief and office boy by turns during the Boer War," Haig used to observe jocularly, referring to his multifarious duties during that campaign of many surprises and difficulties. Now he was deputy-general in command of fifty or more mobile columns; now he was assisting the staff at headquarters, working out problems dealing with matters of organization and equipment.

Seldom Addressed His Men

Haig is, for a soldier, a most singularly shy man. Only on very rare occasions, even during his commandship of the British army in Flanders, did he address his men. He preferred to go among them at night, and to talk to them individually.

This habit he formed during the Boer war, and while on parole after dusk he overheard a serjeant admonishing a private.

"It's lucky for you, young fellow-me-lad, that I don't know how to spell 'insubordination,' else I'd report you to Colonel 'Aig in the morning, and 'e's a 'oly terror when he likes, 'Aig is, and don't you forget it."

Haig had long been known as "Kitchener's man," and no surprise was felt when the former was appointed to command the First Army Corps of the British Expeditionary Force in August, 1914. It was Haig who personally carried out that series of desperate rearguard actions at dead of night that saved the entire British army from envelopment by the rapidly advancing superior German forces.

Praise from General French

"The action of the First Corps on this day under the command of Sir Douglas Haig," wrote General French in one of his earliest dispatches, "was of so skilful, bold, and decisive a character that he gained positions which alone have enabled me to maintain my position for more than three weeks of very severe fighting on the north bank of the river."

During the first battle of Ypres, when the 2nd Worcesters were being hard pressed and the line suddenly broke, Haig rode out with his escort and advanced along the Menin road under heavy fire to rally the troops. The effect of his presence—cool, calm and confident—was electrical. The men followed him, the line was reformed, Gheluvelt was stormed and recovered, and Ypres saved.

In these early days of the World War Haig was frequently in great danger. Once a shell exploded near enough to him to knock him



down. Haig was some moments recovering consciousness, but, when he did, he refused to be taken to the hospital and resumed almost at once important work in connexion with new dispositions of his men.

"Leave it to Haig; he's there," was a dictum frequently on the lips of Sir John French during the terrible autumn of 1914, when the all too small British army was struggling to hold its own against greater forces and vastly superior artillery resources. Soon the whole country was saying the same thing.

In December, 1915, Haig was appointed commander-in-chief. By this time the plea for more shells had been answered, and every day brought more men and big guns to make the chances of victory more even. Just as Sir John French had borne the brunt of the defensive with terrific odds against him, so Haig had to plan an offensive with forces and ammunition on a far larger scale than had ever been handled before. Upon him devolved the responsibility for the wise employment of thousands who willingly offered their lives and bore unlimited hardship for a cause that was now as sacred as a crusade.

Losses at Loos

Already, at Loos, in September, 1915, Haig, as leader of the principal attacking army, had shown something of his quality as an aggressive fighter. The losses were terrible, and Haig was severely criticized for having failed to bring up reserves quickly enough. It must be remembered, however, that this, the greatest of all wars, was yet in its infancy, and that no commander had ever attacked with a British force upon anything like so large a scale.

But Haig learned. In conjunction with Joffre, Nivelle, and Foch, he gradually broke the German resistance at the battles of the Somme (1916), Arras and Messines (1917), the third battle of Ypres (1917), and the first battle of Cambrai (1917). "It was the men who did it," Haig said when congratulated upon these brilliant achievements, although, of course, strategy had played its part, and but for the splendid organization introduced by Haig, and his insistence upon following his own counsel in defiance of Army Council instructions, no such advances could have been made. Of one great battle Haig said:

So little seemed to have been accomplished in that struggle, while the cost was known to all and perhaps magnified unconsciously by the stories of the conditions under which the battle was fought. God knows that there was little need of exaggeration, and that the hardships and sufferings of the heroic men who drove the enemy from Passchendaele were such as no other army has ever been called upon to bear.

After the second battle of Cambrai (1918) there followed the uneasy lull, which was to give place to the final tussle. Haig knew that the Germans were preparing a monster offensive,

A GREAT FIELD-MARSHAL AND HIS FAMILY



Earl Haig was the youngest son of an ancient Fife family, with fighting records dating back to the days of the heroes Bruce and Wallace. His son and heir was born in 1918.

but he could not convince the Army Council that reinforcements were urgently necessary. His removal from the high command was even, at one time, seriously contemplated. In the end, Haig got his tanks and some of his reserves, although not nearly enough with which to withstand the terrific onslaught on General Gough's Fifth Army, which began on the 21st March, 1918.

Notwithstanding the loss of 464,000 in this engagement, which, with consummate skill, he

manipulated so as to preserve his main dispositions and inflict terrible losses upon the enemy, Haig began on the 21st August, 1918, the long and almost continuous battle, which, thanks to the magnificent co-operation of the allied forces, led to the general assault upon the famous Hindenburg line.

Even Foch, whose genius had turned the main tide of the war in the allies' favour, doubted the wisdom of this daring move of Haig's, and the British War Cabinet only reluctantly consented to it. But, as all the world knows, it

THE DELIVERER OF PALESTINE



In 1917 Allenby was placed in charge of the Egyptian Expeditionary Force, and in seven weeks delivered Palestine and aimed a blow at the German dream of world domination.

proved to be the last stroke that utterly broke the power of military Germany. Hindenburg fled before Haig, and it was British soldiers who picked up the half-written letters thrown down in haste by the fleeing German officers.

After his return Haig retired from the high command in 1919 and was succeeded by Sir William Robertson. He was elected rector of St. Andrews University (1916), and received, among many honours, the Order of Merit (1919), the American Cross of Honour (1918), and the rank of G.C.V.O. In 1919 he was granted an earldom.

Perhaps the finest tribute to his character both as a man and as a soldier is the following, expressed by Mr. Neville Lytton :

The common saying is "Oh, Haig is not a clever man." I don't think he is clever; personally, I have never admired cleverness; it is the attribute of small, successful men. Haig's qualities are much more moral than intellectual: what intellectual qualities he has have been used almost entirely within his own profession, but he exhales such an atmosphere of honour, virtue, courage, and sympathy, that one feels uplifted as when one enters the Cathedral of Beauvais for the first time.

The Coming of Allenby

While Haig hammered away in France, Edmund Allenby was carrying out one of the most brilliant campaigns of the whole war in south Palestine, the scene of the armageddon prophesied in the Bible. No other commander in the British army sprang so quickly into fame or took part in a drama so picturesque and impressive as did this old Haileybury boy, who owed much of his success, it is said, to his genius for friendship.

Believers in the power of association may find useful evidence in the fact that this great crusader was born on St. George's day, 1861, and that his name corresponds to a Mohammedan word meaning "the Prophet of God," while, read backwards in the Arabic style, it means "the son or servant of God."

After his college days Allenby sat unsuccessfully for the Indian Civil Service examination and entered the Royal Inniskilling Dragoons in 1879. He distinguished himself in active service during the Bechuanaland (1884-85) and Zululand (1886) campaigns, and he commanded the 5th Lancers in South Africa (1900).

It was Allenby's cavalry that screened the retreat from Le Cateau on the 26th August, 1914, and the following year he succeeded Sir Herbert Plumer as commander of the 5th Corps. He was in charge of the Third Army during the Somme offensive of 1917, and carried out brilliant operations at the battle of Arras.

About this time a severe setback in Palestine caused the British Army Council great alarm, and it was decided to place Allenby in charge of the Egyptian Expeditionary Force as a successor to Sir Archibald Murray.

Between Gaza and Beersheba

Upon his arrival Allenby found the Turks firmly entrenched upon a thirty-mile front between Gaza and Beersheba. German officers and guns made the Turkish ensemble formidable. Their troops occupied well-watered ground, with long communications and powerful reserves. The British troops, on the other hand, were in great difficulties, both in regard to water and transport.

There is an old Arabic tradition that the Turk would not be driven out of Jerusalem

LORD AND LADY ALLENBY IN THE RESIDENCY GROUNDS AT CAIRO



For his brilliant services in the World War the gallant commander was created a viscount, taking the title of Viscount Allenby of Megiddo and Felixstowe, and was voted a sum of £50,000. In 1919 he was made a field-marshal, and in the same year was appointed High Commissioner for Egypt and the Sudan.

until the Nile flowed into Palestine. Those who made this seemingly safe prophecy reckoned without modern methods of irrigation and water supply. To-day water from the Nile does flow into Palestine, by way of a twelve-inch pipe, and the Turk is out of Jerusalem.

His Ruse Against the Turks

Allenby delayed his offensive for many months, during which he brought the organization of his forces to the highest pitch of efficiency compatible with the conditions of the country. His plan was to delude the enemy into supposing that he intended to attack Gaza, while in reality he concentrated his forces upon Beersheba, which contained the best water supplies.

The ruse worked. On the 27th October Beersheba was taken in magnificent style by the London Yeomanry Brigade and the 53rd Welsh Division. Next day Gaza was bombarded from the sea by British and French warships. Meanwhile Turkish entrenchments and earthworks were being stormed all along the line.

Gaza was taken between the 6th and 9th of November, and the alarmed Turks fell back and made frantic efforts to fortify Jerusalem. In a dispatch General Allenby wrote:

Within the space of fifteen days our force had advanced sixty miles on its right and about forty on its left. It had driven the Turkish army of nine infantry divisions and one cavalry division out of a position in which it had been entrenched for six months, and had pursued it, giving battle whenever it had attempted to stand, inflicting on it losses amounting probably to nearly two-thirds of the enemy's original effectives. Over 9,000 prisoners, about 80 guns, more than 100 machine guns, and very large quantities of ammunition and other stores had been captured.

Guns on Calvary and Mount Olivet

On the morning of the 9th December Izzet Bey, the Turkish Governor of Jerusalem, broke the instruments at the telegraph office with his own hands and dismissed the staff. All day long a stream of Turks filed out of the Jaffa gate. There were guns on Calvary and Mount Olivet, but the Welsh Division silenced them.

Two days later General Allenby entered Jerusalem, walking on foot out of deference to

the tradition that the deliverer of the Holy City would not pass through the gates on horseback. One of the conqueror's first actions was to publish an assurance that all religions within the city would be respected, and that every sacred building, monument, or shrine would be protected and maintained.

Thus, in seven weeks, Allenby delivered Palestine of a scourge and at the same time aimed one more deadly blow at the German dream of world domination. The gallant commander was created Viscount of Megiddo and Felixstowe, and voted a sum of £50,000 in 1919. In the same year he was also made

GALLANT MAUDE OF BAGDAD



In the all too early death of Sir Stanley Maude, who died of cholera in November, 1917, the country lost a soldier of remarkable skill and energy.

a field-marshal and appointed High Commissioner for Egypt and the Sudan.

Three weeks before Allenby entered Jerusalem Major-General Sir Stanley Maude died of cholera in Bagdad, which town he had successfully wrested from the Turks. Although his accomplishment can hardly be ranked equal with those of many commanders whose tasks were more onerous, he carried out a brilliant campaign with extraordinary skill, tact and patience.

Born of Irish parents on the 24th June, 1864, Maude was educated at Eton and Sand-

hurst, and served with the Coldstream Guards in the Sudan and in South Africa. He was on the staff of the 5th British Division at the outbreak of the World War, but was severely wounded before he had time to distinguish himself. In 1915 he was sent with the 13th Division to Egypt, Gallipoli, and Mesopotamia.

Following upon the failure of the first Mesopotamian Expeditionary Force and General Townshend's investment in Kut and surrender with 9,000 men, the Turks had boldly pushed forward into Persia. The scandalous negligence of the Indian Government had led to much sickness and death among the British troops, and the Government had to face the possibility of a serious *débâcle*.

Maude Put in Charge

Energetic measures were taken, although unfortunately too late to relieve Townshend and his heroes shut up in Kut. The home Government took over control of supplies and organization, and Maude was appointed to take charge of an all but desperate situation.

Maude saw that the enemy forces were centred at Bagdad, and he decided upon a bold thrust on that town. Terrible difficulties were encountered. Dust and the sandfly, lack of food and water, had to be dealt with as resolutely as the enemy himself lurking in ambushes.

By making a clean cut of red-tape regulations Maude turned a sick and dispirited army into one capable of supreme efforts. Ice plants and soda-water factories, vegetable gardens and chicken farms were established at the base, and with the arrival of new transport material it was possible to keep the advancing column well fed and in good condition.

The Turks Yield Gradually

The main advance began in October, and on the 15th Kut was sighted. Floods during the following months greatly impeded progress, but the Turks were gradually yielding. Rain, for which the latter had been praying, came too late. The brilliant tenacity of the Scottish troops, the resource of the British engineers in spanning swollen rivers, and the untiring energy and skill of Sir Stanley Maude proved too much for the doggedness and cunning of the Turk.

Kut was entered on the 24th February, but some hard fighting was necessary to keep the Turk on the run. On the 11th March the British troops entered Bagdad.

Sir Stanley Maude continued operations for several months, but, returning to Bagdad, he attended an entertainment and drank coffee containing milk, which unfortunately proved to be infected with cholera. He died on the 18th November, 1917.

REYNOLDS, GAINSBOROUGH, and LAWRENCE

Three Men of Genius Who Followed the Same Profession, and yet Differed Entirely in the Interpretation they Brought to Bear upon the Same Subject

THE first half of the eighteenth century was notable in the history of Britain in that it produced three portraitists whose names will go down to history, not only as great masters of their craft, but as artists who each painted the same model, each produced a beautiful picture, but whose vision was in each case totally different from the other.

So is it always in the realm of the senses.

Give two great pianists a piece of music and they will interpret it in entirely different fashion, although both may be really beautiful. As in music, so in poetry, and so still more in art, and in this last we can have no finer example of three men, all following the same profession, and all undoubtedly stamped with genius, who yet differed entirely in the interpretation they brought to bear upon the same subject. They are Joshua Reynolds, Thomas Gainsborough, and Thomas Lawrence. Before comparing their work, it is necessary to say something about them.

Joshua Reynolds, afterwards Sir Joshua, was born at Plympton, in Devonshire, on the 16th July, 1723. His father was rector of the local grammar school, and, intending his son to be an apothecary, had him trained in classical subjects. As with nearly every other great artist, Joshua Reynolds early showed his distaste for his allotted profession and his inclination for drawing. Every print which came his way he copied diligently with such success that, after a short time, his father felt that he could no longer stand in his way, and yielded to his son's desire for artistic training. He was sent to London, where he remained for about two years a pupil of Hudson, after which he returned to Devon and set up in Plymouth as a portrait painter.

WHERE REYNOLDS WAS TAUGHT



In this room, at the free grammar school at Plympton, in Devonshire, Sir Joshua Reynolds was taught by his father, who was rector of the school.

Then followed an extremely fortunate occurrence, the young painter fell in with Commodore Keppel, who, attracted both by the man and his work, invited him on to his ship, the *Centurion*, which had just been appointed to the Mediterranean station. Reynolds was very glad to avail himself of the opportunity of seeing the world, and especially the galleries of Rome. For two years he remained in the

Italian capital, devoting most of his time to studying the works of Raphael and Michelangelo. From Rome he went to Parma, where the paintings of Correggio influenced him; from Parma he journeyed home via Florence, Venice, and Paris, studying diligently the while.

On his arrival in England, he settled in Great Newport Street, later moving to No. 47 Leicester Square. The good fortune that had attended him still continued, for he painted a portrait of his patron, Commodore Keppel—by this time Lord Keppel—which immediately established his reputation.

Van Dyck had been dead 100 years. His memory was undoubtedly a great tradition in England, yet no Englishman had succeeded to his fame in spite of the fact that portraiture

was the form of art which interested Englishmen the most. Reynolds had learnt from the Italians the well-considered rules for historical and landscape subjects; these, by his genius, he was able to adapt to portrait painting. He had learnt that every portrait should be a picture as well as a rendering of the features of the original.

From Michelangelo he had learnt attitude and expression; Correggio had taught him light and shade; his sojourn in Venice had revealed to him the mysteries of colour; Raphael's women and children were full of sentiment,

while Rubens's pictures were equally full of dignity and splendour. All these influences Reynolds brought to bear in his portraiture. "No one," said James Northcote—one of Reynolds's pupils—"ever appropriated the ideas of others to his own purpose with more skill than Sir Joshua. The opinion he has given of Raphael may with equal justice be applied to himself. His materials were generally borrowed, but the noble structure was his own."

To keep pace with the demands for his portraits, Reynolds employed several assistants,

REYNOLDS'S HOUSE IN LEICESTER SQUARE



At Sir Joshua Reynolds's London house in Leicester Square, a most sumptuously furnished building, hosts of famous and fashionable people were entertained.

as well as taking a number of pupils. "No man," he said, "ever made a fortune with his own hands."

From five guineas per portrait, which he received for most of his earlier works, he rapidly increased his price until, before long, he was making some £6,000 a year. Like most artists, however, he was never able to save his money; but, unlike many others, he spent it wisely, in purchasing the finest pictures he could obtain.

Not only was he successful in art, but he was exceedingly popular in society. His invitations to dinner and to stay with people of

rank were more numerous than he could accept. He was also popular with the literary people of his time, while the stage held a great attraction for him. Garrick, Goldsmith, and Johnson could all be counted among his friends. In the year 1760 there was opened in London the first public exhibition by British artists of their own works. To this Reynolds sent four portraits, including those of Elizabeth Duchess of Hamilton, and Lady Elizabeth Keppel. The following year there were two exhibitions, and owing to a split between the artists, Reynolds joined that at Spring Gardens, the Incorporated Society of Artists. In this year the young king, George III, was married, and Reynolds painted three of the bridesmaids, beautiful pictures, all of them.

Foundation of the Royal Academy

The chief interest in the years that followed was the founding of the Royal Academy, in which Reynolds took a leading part. There had been many dissensions in the Society of Artists, from which, however, Reynolds held aloof, but, after the petition to the king, the Royal Academy was founded in the year 1768, and Reynolds was elected as first president. His first discourse was delivered on the 2nd January, 1769, and dealt chiefly with the value of academies and what he conceived to be the right direction in which to study. On the 21st April, five days before the first Royal Academy exhibition, Reynolds was knighted.

At this stage we may leave Reynolds to turn to his great rival, Thomas Gainsborough, who was born early in 1727, the son of the chief constable of Sudbury.

Of the artist's father we know very little, except that he was a good-natured man, fond of his joke and with little genius for business—so little, indeed, that he went bankrupt when the artist was only five. Of Thomas Gainsborough's mother we know still less, except that she bore her husband nine children, of whom the artist was the youngest.

Distaste for Education

Thomas began his education in his uncle's school, where we can imagine him dreaming most of his time instead of attending to his work. Books had little meaning for him at any part of his life, and, as his uncle was indulgent in the matter of attendance, we may well suppose that the tedium of school routine was frequently relieved by means of sketches and caricatures. In only one branch of his school work did he actually excel. This was in handwriting, and on more than one occasion he was able to turn it to account.

Once, when a half-holiday had been refused, the future artist decided to take matters into his own hands, and forged his father's signature

BRITISH MASTERS of PORTRAITURE



"A Child with a Kid," by Sir Thomas Lawrence, in the National Gallery, London. From drawing portraits of the customers at his father's inn, Lawrence rose to be the fashionable portrait painter of his age.

For biographies not included in the Groups see detailed Index

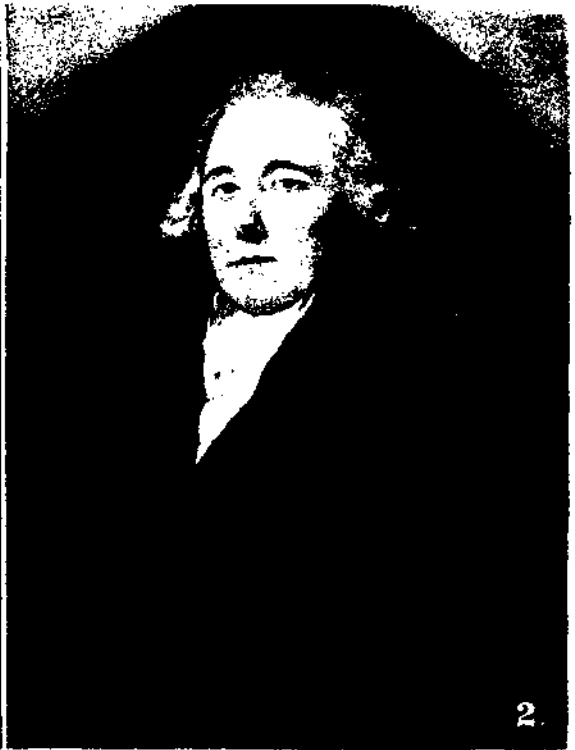
SOME SIR JOSHUA REYNOLDS' MASTERPIECES



1. The ever popular and delightful "Age of Innocence," in the National Gallery, London. 2. "St. John in the Wilderness," in the Wallace Collection, London. 3. A striking portrait of Miss Penelope Boothby. 4. "The Cherub Choir."

For biographies not included in the Groups see detailed Index

SOCIETY BEAUTIES AND A CLERICAL BARONET



1. Countess Grosvenor, by Sir Thomas Lawrence. 2. The Rev. Sir Henry Bate Dudley, Bart., by Gainsborough, in the National Gallery, London. 3. Lady Betty Foster, by Sir Joshua Reynolds. 4. Gainsborough's "Mrs. Siddons."

For biographies not included in the Groups see detailed Index

A PORTRAIT GEM BY GAINSBOROUGH



The Wallace Collection London numbers among its art treasures this delightful portrait of Miss Haverfield by Gainsborough. In one very important element of portraiture Gainsborough was unsurpassed—he never failed to obtain a truthful likeness.

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The Wallace Collection, London, numbers among its art treasures this delightful portrait of Miss Haverfield by Gainsborough. In one very important element of portraiture Gainsborough was unsurpassed—he never failed to obtain a truthful likeness.

For biographies not included in the Groups see detailed Index

ONE OF THE FIRST MEETINGS OF THE ROYAL ACADEMY



The first meetings of the Royal Academy, founded in 1768, took place in some rooms in Pall Mall. On the 2nd January, 1769, the president, Sir Joshua Reynolds, gave the first of his famous discourses, during which he dealt chiefly with the value of academies and what he conceived to be the right direction in which to study.

to a request to "give Tom a holiday" so cleverly that it passed without question. Unfortunately for Tom, John Gainsborough had occasion that day to visit his brother-in-law, and, honest man that he was, expressed a fear that his son would end by being hanged. On being shown the sketches which were the result of the young lad's truancy he changed his mind, and remarked that his son would one day be a genius.

The evidences of Gainsborough's early power over the pencil are many, and one of the most interesting, and one, too, which went far to decide his future career, was the incident of "Tom Peartree."

Sketching a Misdemeanant

At the back of the Gainsborough house stood an orchard, and the story runs that, one day, Thomas was standing behind a tree when he saw a face looking over the fence. From the expression on the face, it seemed likely that its owner was about to make a raid on the fruit. The young artist could not resist making a study of this scene. All unobserved, he transferred to paper the stealthy glances of the

intruder as he spied out the land for his bold attempt. He waited till the completion of his picture before revealing himself to the thief, who promptly decamped more hurriedly than he had arrived.

At breakfast on the following morning, the boy laid his drawing on his father's plate; so clever was it that the culprit was quickly identified, and it was only John Gainsborough's extreme good nature which saved the thief from the full penalty of the law, which in those days was death.

Sent to a London Academy

By the time that Tom had completed his schooling, John Gainsborough had recovered from the troubles of his bankruptcy, and was able to send his son to study art in the academy in St. Martin's Lane, Westminster. Thus, in 1742, we find him setting off in high spirits.

He came first under the direction of Francis Hayman, an expert painter as far as technique was concerned, but almost completely without imagination or insight. Hayman was very well known in theatrical circles, and it was from his first master that Gainsborough probably

For biographies not included in the Groups see detailed Index

conceived the affection for actors and musicians which increased more and more as he grew older. After working for a year in Hayman's Academy, Gainsborough took a studio in Hatton Garden and started on his own account as a portrait and landscape painter. At first, however, he was not very successful. Patrons were few and living was dear, he therefore decided to return to Sudbury, where he could live much cheaper, and where, being known, he could obtain at least as many patrons.

Shortly after his return home, though not quite nineteen years old, he fell in love with Miss Margaret Burr. Not the least among her attractions was the fact that she possessed £200

AS THE PAINTER SAW HIMSELF



Sir Joshua Reynolds's portrait of himself as a young man. From five guineas per portrait his prices rapidly increased until he was soon earning some £6,000 a year.

a year in her own right. She was, however, an exceedingly beautiful woman, and, following their marriage, Gainsborough and his wife moved to Ipswich where his wife's annuity was sufficient to enable him to await patrons. In Ipswich he remained for fifteen years, continually studying in the open air, and executing such small commissions for portraits as came to him. In this way he succeeded in discovering for himself the manner of painting most suited to his needs and acquired, too, an extraordinary facility with the brush.

In 1760 he was advised to move to Bath, which was at that time the most fashionable city outside London. It was the day of Beau Nash, and the whole of the gay world congre-

gated in the Pump Room to dance and talk scandal.

Gainsborough had an immediate success, and before very long he was given more commissions than he cared to perform. He seldom worked more than five hours a day, devoting his leisure hours to his wife and to music, the latter becoming one of the great passions of his life. It was said, indeed, that he painted for business and played for pleasure. His greatest enjoyment was found in mastering a new instrument.

Receipt of a Royal Commission

In Bath he remained for fourteen years, when he moved to London, and was commissioned by George III to paint a portrait of himself and the queen. It was in London that he became a great rival of Reynolds.

We may now turn to the third of our group, Thomas Lawrence, afterwards Sir Thomas, and president of the Royal Academy. Born in Bristol, on the 4th May, 1769, he was the youngest of sixteen children. His father, the son of a Presbyterian minister, had been well educated, but had fallen in life, and at the time of the birth of his youngest son was landlord of the White Lion in Broad Street, Bristol, moving three years later to the Black Bear Inn, then a favourite halting place of society on their way to Bath.

Like Gainsborough and Reynolds, Lawrence developed a precocious genius with the pencil, and was used by his father as an attraction to his visitors. 'Gentlemen here is my son' was a favourite formula of the old man. 'Will you have him recite from the poets, or take your portraits?' In the latter pursuit he was noted as one who would one day be a great artist.

Main Support of His Parents

Young Lawrence does not seem to have had very much schooling, indeed, with the exception of a few lessons in French and Latin, he may be said to have gone entirely without education. His talents, however, were altogether too much out of the ordinary not to attract the attention of many of the notable visitors to the inn, among these we may include Johnson, Burke, Garrick, Wilkes, and Sheridan. It was by young Lawrence's pencil that the family was, even in the early years of his life, mainly supported, and, like Gainsborough, they moved to Bath, and, also like Gainsborough, found it greatly to their financial advantage.

Before he was seventeen, young Lawrence had become quite a fashionable portrait painter. His patrons included the beautiful Duchess of Devonshire, and Sir A. Harpur proposed to adopt him as a son. It is perhaps the only occasion in the history of art that a boy of eleven set up for himself in a studio which was haunted by the cream of fashionable society.

The young artist did not lack self confidence. In his seventeenth year he began to paint in oils, and so satisfied was he with his attempts that he wrote to his mother that "excepting Sir Joshua, for the painting of a head I would risk my reputation with any painter in London." Indeed, shortly afterwards, he moved to London, taking splendid rooms in Leicester Square, and migrating from there via Duke Street, St James's, to 41 Jermyn Street. In both 1786 and 1787 he had several pictures at the Royal Academy exhibition, and, in the latter year, was introduced to Sir Joshua Reynolds, and painted his portrait. The story goes that the great Sir Joshua once said of Lawrence, "this young man has begun at a point of excellence where I left off."

George III, although it could scarcely be said of him that he was either a lover or patron of the arts, took a great interest in the young painter. He endeavoured in 1790 to procure his election as an associate of the Royal Academy, although he was but twenty-one years of age, and the king himself had sanctioned a rule requiring associates to be at least twenty-four. The attempt was unsuccessful, and the king was much offended, the natural consequence was that, in the following year, Lawrence was elected a "supplemental associate," an honour entirely irregular and one which no other artist has ever enjoyed.

The year 1792 saw the death of Reynolds, and Lawrence was appointed Principal Portrait-Painter-in-Ordinary to the king. In 1810, the death of Hoppner left him without a rival, and he obtained what were then considered enormous prices for his pictures.

Thomas Lawrence was knighted in 1815 by the prince regent, and three years afterwards he made a journey to Aix-la-Chapelle for the express purpose of obtaining the portraits of the members of royalty and the numerous diplomatists who were gathered there to decide the problem of the withdrawal of the army of occupation from France.

He then took the opportunity of visiting Rome and Vienna, and everywhere he went he was received with the greatest respect and admiration. Princes and other people of high degree

accorded him a warm welcome, not only because he was Lawrence, the famous painter, but because he possessed such courtly manners.

On the death of George III in 1820, his appointment as Principal Portrait-Painter-in-Ordinary to the king was continued. Benjamin West, the president of the Royal Academy, had died in the same year, and Lawrence was appointed in his stead.

During the last ten years of his life, his fame increased rather than diminished. He lived in a beautiful house, surrounded by the most magnificent treasures of art, including the finest collection of drawings by the old masters

ever acquired by a private individual. Notwithstanding, however, the huge fees which he received, he was never without financial worries, chiefly owing to the ill management of his affairs. On his death on the 7th January, 1830, it was found that the realization of his estate was barely sufficient to pay his debts. He was buried in St Paul's Cathedral.

These, then, are our three artists, and, knowing something about their lives and characters, we can compare their work, more especially in their portraits of Mrs. Siddons, the famous actress. In 1784 there was exhibited at the Royal Academy Sir Joshua Reynolds' picture, "Mrs Siddons as the Tragic Muse," and in the same

year the famous actress sat for her portrait to his rival, Gainsborough. Sarah Siddons was then twenty-eight, in the prime of her beauty and in the first flush of that popularity which for thirty years was to make her the veritable queen of the English stage.

Her father, Robert Kemble, had been a country actor, and her three brothers and one sister were also connected with the theatrical profession. As a girl, Sarah played parts in her father's companies, marrying an actor named Siddons when only eighteen. In 1775 she made her first appearance in London, playing Portia with Garrick at the Drury Lane Theatre, but with so little success that she retired into the provinces, where she remained for seven years. Her reappearance, however, brought with it instant success, and parts requiring queenly dignity and tragic pathos brought all London to see her. Let us compare

THOMAS GAINSBOROUGH



A splendid likeness of Thomas Gainsborough painted by himself. The original now hangs in the National Portrait Gallery, London.

the portraits of this great actress by the three great artists

In Sir Joshua's picture she is dressed in an "heroic" costume, and is represented as if gazing into the dim distance, searching for inspiration. In Gainsborough's picture she is typically a woman of excellent character with great propriety, very calm, modest, quiet, and unaffected. So wrote Miss Fanny Burney in her diary. Continuing she described her as "possessing a fine countenance, with eyes both intelligent and soft."

It has been said that Gainsborough painted

A FASHIONABLE MASTER OF PORTRAITURE



Before he was seventeen Thomas Lawrence had become quite a fashionable portrait painter. His patrons included the beautiful Duchess of Devonshire. Sir A. Harpur proposed to adopt him as a son.

this portrait in order to refute the theories of Reynolds. In one of his discourses which, as president of the Royal Academy, he delivered to his students, Sir Joshua laid down the principle that the chief medium of "light" in a picture should invariably be of warm, mellow colours, and that blues, greys and greens—that is, the colder colours—should be used only to support and balance the others, and these, furthermore, only in a very small degree

"Let the light be cold and the surrounding colours warm," he said, "as we often see in the work of the Roman and Florentine painters, and it will be out of the power, even in the hands of Rubens or Titian, to make a picture splendid and harmonious."

Gainsborough undoubtedly took up the challenge, but whether through the medium of the portrait of Mrs Siddons or with the equally famous "Blue Boy," is not quite certain. It matters little whether either of these portraits were painted to refute his rival's theories, all that matters is that they succeed. Where

Reynolds chose the safe path, regulating his art on well established principles, Gainsborough was one of the originals, a student of nature with a dreamy, poetic temperament; the one was a man of the world, the other, simply an artist. The distinction between the characters of the two is deeply marked in these paintings. In Gainsborough's portrait there is no striving after effect, except in the delicacy of his colours.

Lawrence's Portrait

Lawrence's portrait of Mrs. Siddons is as different from those of Reynolds and Gainsborough as the last two are from each other. It may be described as sentimental. There is nothing of the heroic in it. Lawrence sees Sarah Siddons not as an actress in rapt concentration, not striving after effect, scarcely even dignified. He sees her merely as a beautiful woman, and the sentimentality of the man is brought to bear upon his work.

Let us go a little further in our analysis of these three pictures. If we take the arrangement we find that that of Reynolds is such as to make the onlooker forget the figure in the beauty of the surroundings. His picture is painted in what is called the grand style"—the actual person-

ality of the actress is enlarged by the surrounding atmosphere of emotion. When we turn to Gainsborough's

picture we find no attempt at either grandeur or the dramatic. It is simple and straightforward, vigorous and sure in its drawing, and yet wonderfully delicate in its refinement of expression, and the rendering of face and hair. It is, also, more modern in style.

[See "Life of Sir Joshua Reynolds," by J. Northcote (1819). "Gainsborough and His Place in English Art," by Sir W. Armstrong (1896). "Life of Sir Thomas Lawrence," by Sir W. Armstrong (1913) and "Most Eminent British Painters," by A. Cunningham (1829-33).]

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A FLORENCE NIGHTINGALE in SERBIA

How Brave Dr. Elsie Inglis Left the Comforts of Her Home to Minister to the Sufferings of the Stricken People in Serbia during the World War

AS the name of Florence Nightingale is linked with the history of the Crimea, so is that of Dr. Elsie Inglis with the tragedy of Serbia. The names of these two women are inseparable from the story of the countries which they served, and in the days to come, when our grandchildren study the history of the two great wars, it will be very hard to say who was the greater heroine of the two.

Mr. John Inglis, her father, had a brilliant career as an Indian civil servant, and her mother, Harriet Thompson, was the daughter of an Indian civilian, so, though she was Scottish by descent, all the early associations of Elsie Maud Inglis were of the Orient.

It was in 1863, after the Mutiny, when conditions in India were becoming settled once more, that Mrs. Inglis rejoined her husband in the East, following a separation of seven years, leaving behind her in England a family of six children.

In the following year, at Nami Tal, one of the most beautiful hill stations in the Himalayas, a dark blue-eyed baby girl was born. The baby was named Elsie, and almost from the day of her birth she was a splendid little traveller, who accommodated herself to the trials of Indian camping and travelling life with the utmost ease.

Later another daughter, Eva, was born, and it is from the correspondence of this companion sister that some glimpses of Elsie Inglis's happy childhood in India are obtained. Even in nursery days her future profession seems to have had an attraction for Elsie. She painted little red spots all over the faces and bodies of her family of forty dolls, for an epidemic of measles had been decreed by

the embryo doctor. As they slowly recovered, so many spots were wiped off each day until the epidemic was over.

It was a happy, uneventful life that Elsie Inglis had as a child. The year was divided between the plains in the winter and the Indian hill stations in the summer. From the earliest days there was a very special friendship be-

AN HONOURED DAUGHTER OF BRITAIN



For some months after her capture by the Germans, Dr. Elsie Inglis was allowed to continue her ministrations among the Serbians. In 1916 she was sent back to England.

tween Elsie and her father, and it was his wise comprehension and understanding love that was destined to be the chief guide and help in his daughter's career.

In 1876, John Inglis retired from his arduous service, and the family, before returning to Scotland, visited Tasmania, where two of the elder sons had settled.

It was Elsie Inglis who instituted "school colours" at the college she attended. They were not the pretty hatbands so dear to the modern school-girl, but two inches of blue and white ribbon sewn on to a safety pin and worn on the lapel of the coat.

After passing two years in Tasmania the Inglis family returned to Scotland, and settled in Edinburgh, where Elsie continued her education until 1882, when her father sent her to Paris for a year. Elsie returned from Paris, her

school-days ended, and already she had a sense of latent powers. Shortly after her arrival home her mother died of scarlet fever, and from that day the daughter shouldered the household burdens, and remained her father's stay and comfort until he died.

It was at the Edinburgh School of Medicine that Elsie Inglis received her first medical teaching. Everything was in its initial stages, and women medical students acquired the knowledge necessary to enable them to take their degree under extremely difficult circum-

stances In 1891 she went to Glasgow, where the conditions for studying clinical work were more favourable than in Edinburgh After passing the examination for the Triplk Qualification in 1892, she went to London and took up the position of house surgeon in the new hospital for women in Euston Road

In the years that followed, Dr Elsie Inglis led a life crowded with activity of some form or other Not content with her profession—or perhaps, rather because her profession brought her into contact with conditions with which she could not be content—she took a prominent part in the struggle which women

HER GREAT-GRANDFATHER



About 1780 Alexander the great grandfather of Elsie Inglis emigrated from Scotland to Carolina He pursued the calling of merchant until 1791 when he was killed in a duel

were then having for political freedom She organized meetings all over the country she delivered lectures on the suffrage question, and she was always to be found where the fight was hardest strengthening the weak and encouraging the faint hearted

Later Dr Elsie Inglis began to practise in Edinburgh where she worked in partnership with the late Dr Jessie MacGregor When the University of Edinburgh admitted women to the examinations for medical degrees she graduated M.B. C.M. in 1899 From that date her life was completely occupied with her practice her suffrage work and the founding of a nursing home and maternity centre Her father's death deprived her of what had

been the mainspring of her existence, but, in her personal sorrow, her labours for others were redoubled

When in 1914, the war broke like a thundercloud upon the world, Dr Elsie Inglis was one of those whom it found calm courageous, and fully equipped for the part she was to play among the armies of the allied nations.

But in those early days of August, 1914, when most people thought that the war would be over in three months, and every one was certain that the peace celebrations would be held within six, enterprising women were looked on a little coldly in official quarters. It was on the occasion of Dr Elsie Inglis's visit to the War Office to place her professional services at the disposal of her country that the historic remark, "My good lady, go home and sit still," was uttered by a doubtless overworked departmental chief.

A Remark that Lived

Later, that War Office official was destined to become anonymously famous for, during the grim days that followed, when the women of Britain fought the battle of typhus fever in Serbia his remark became almost a classic Women half dead with fatigue would stagger into their quarters after a hard night in the wards or a trying day on the march What's the next job? somebody would ask, and the reply "My good lady, go home and sit still," never failed to raise a laugh even in those dark days when the Germans held the country and Dr Inglis and the members of her unit were prisoners of war

It was after the official refusal of her services by the War Office that Dr Elsie Inglis evolved the plan of forming a hospital unit of her own in Edinburgh So the Edinburgh suffrage offices (no longer needed for propaganda, owing to the suspension of political hostilities between the sexes as a result of the war) became the headquarters of the Scottish Women's Hospitals

When Dr Inglis announced that funds to the extent of £50 000 must be advertised for, even her greatest admirers gasped, and doubted the possibility of raising such a sum Ultimately, however, not £50 000, but £200 000 was the amount subscribed for the Scottish Women's Hospitals

Scheme Finally Adopted

It was in October 1914 that the scheme was finally adopted by the Scottish Federation, and Dr Elsie Inglis was asked to go to London to explain the plan to the National Union, and to speak at a meeting in the Kingsway Hall The meeting was an enormous success, and the National Union adopted the plan of campaign and immediately set to work to pro-

A TRIO of 19TH CENTURY COMPOSERS

Franz Schubert, Edvard Grieg, and Charles Gounod, Who Gave to Their Respective Countries a Heritage of Music that will Live for Ever

"HE has learned everything," said a musician who had been asked to instruct the boy Schubert in harmony, "and God has been his teacher." The statement bore out that of the choirmaster at the village where Schubert lived. "Whenever I wished to teach him anything," he said, "I found that he had already mastered it. Consequently I cannot be said to have given him any lessons at all; I merely amused myself, and regarded him with dumb astonishment."

Perhaps it is not quite true to say that Schubert "mastered" what his teachers did not need to teach him. He was born with the knowledge and the allied power which other musicians had to labour for years to acquire. As soon as he realized what music was, and how it could be produced, he began to compose, and he continued ceaselessly, and without apparent effort, throughout his all too short life.

He composed three of his most favourite Shakespearean songs during an afternoon's walk, writing the music at a tavern where he had stopped for refreshment. In one year he produced six operas, two masses, two symphonies, a large amount of Church and chamber music, and one hundred and fifty songs.

His enormous output and the incredible ease



The Schubert Memorial at Vienna. It was by his noble masses and exquisite songs that this composer gradually won the deserved reputation of being the most worthy successor to Beethoven.

with which he composed—starting one piece as soon as he had finished another—gave rise to a legend that he must have been subject to states of clairvoyance, especially as he frequently forgot his own music. Once, after listening to the playing of one of his own songs, he remarked, innocently, "H'm, pretty good song that; who wrote it?"

Such prodigality, had they attempted it, would have killed many composers tougher in body and spirit than the delicate, poverty-stricken Schubert. But he did not die through overwork. It is more likely that the joy of composition, the consciousness of living in the element of music, sustained his frail being through so many hardships and bitter disappointments.

Franz Peter Schubert was born on the 31st January, 1797, at Himmelportgrund, a small suburb of Vienna. His father was the parish schoolmaster, and his mother had been cook in a Viennese household. There were fourteen children of the marriage, and it is not to be wondered at that Schubert early learned the meaning of poverty, and that his strange garb, consisting of odds and ends, if not of shreds and patches, earned him the nickname of "the miller's son" at school.

Schubert soon had the laugh on his side. It was by his wonderful

SCHUBERT, GRIGG, AND GOUNOD

A Family Orchestra

use of a naturally beautiful voice that he had won entrance to the Imperial Chapel, to which the school was attached. Masters and boys joined in flattery and adulation of the singer, who talked with inspired enthusiasm of the "angel songs" of Mozart and Beethoven.

The good humour of his nature won him friends and help on all sides. His classmates clubbed together and gave him money with which to buy music-paper. A joiner's assistant in the village, hearing that the piano in the Schubert household was not a very good one, took the young musician to a pianoforte warehouse where he could choose the best instrument and practise for as long as he liked.

Poverty did not quench the spirit of fun in the boy, who must have realized that his life

Meanwhile, Schubert had formed an amateur orchestra, consisting of his father and his many brothers and sisters. For years this little band, humble and inadequate as it was, enjoyed the privilege of being the first to play many of Schubert's numerous compositions, and, although the latter's sensitive ear must often have been cruelly hurt by discords, he never rebuked or severely criticized the players.

Schubert's ambition, which he never realized, was to become a great opera writer. His first opera, *Des Teufels Lustschloss*, was begun in his seventeenth year, at the same time as he wrote his "Symphony in D." The opera was never performed, for the story upon which it was based proved to be too wildly extravagant for stage production. Years later, Schubert was glad to sell the manuscript in order to pay a debt. The composition was ultimately thrown into the fire by a careless servant girl.

Becomes a School Teacher

Many of Schubert's loveliest songs and most beautiful masses were composed during a period of great misery and dreariness. After leaving school, he was compelled to earn his living as an assistant teacher in his father's school. He, who loved change and freedom, and who longed to be composing all hours of the day, was forced to the bitterly uncongenial task of cramming the rudiments of arithmetic into the hard heads of unwilling, inattentive little boys.

You lucky mortal (he wrote at this period to his brother), what a thoroughly enviable lot is yours! You live in a sweet golden freedom; can give full play to your musical genius; scatter your thoughts about just as you please; become petted, praised, idolized, whilst one of our lot, like an old carthorse, must put up with all the vagaries of noisy boys, submit to heaps of ill-usage, and cringe in all submission to a thankless public, and saddle-pated, superstitious Brahmins.

That Schubert was rescued from a drudgery which embittered him, although it did not warp his genius, was due to the generosity of Franz von Schober, a wealthy student at Vienna University, who invited him to live with him. Afterwards, Schubert was engaged by Count Esterhazy as music teacher to his family. But the musician could not remain settled for long. In 1819 he fled from his tiresome pupils and went to live in an attic with the bohemian poet Mayrhofer. The two friends were as unlike as possible; Schubert, exuberant, gay, full of hope and confidence in the future; Mayrhofer, gloomy, despondent, although witty and companionable. He wrote doleful songs and passed them across the attic to Schubert, who, strangely

SCHUBERT'S BIRTHPLACE IN VIENNA



It was in this unpretentious Viennese dwelling that Schubert was born on the 31st January, 1797. As his father, the parish schoolmaster, possessed fourteen children, Schubert early learned the meaning of poverty.

would be a hard one. He wrote in the following manner to one of his brothers:

You know by experience that a fellow would like at times a roll and an apple or two, especially, if, after a frugal dinner, he has to wait for a meagre supper for eight hours and a half. The few groschen that I receive from my father are always gone the first day, and what am I to do afterwards? "Those who hope will not be confounded," says the Bible, and I firmly believe it. Suppose, for instance, you send me a couple of kreutzer a month: I don't think you would notice the difference in your own purse, and I should live quite content and happy in my cloister.

Curiously enough, the light-hearted boy's first important composition was the rather morbid "Corpse Fantasia," based upon a poem by Schiller. It was written in 1810, when Schubert was thirteen years old. Next year he wrote his first songs, "Hagar's Klage" and "Der Vatermörder," which attracted the attention of Antonio Salieri, who then became his teacher.



THE HOUSE IN WHICH EDVARD GRIEG WAS BORN



Here, in Bergen, in the building directly on the right, Edvard Grieg was born. Although before the age of six he had found his way to the keyboard, perhaps by instinct, his first ambition was to become a preacher, and many were the sermons he used to deliver from the footstool behind his father's high-backed chair.

enough, never once failed to compose appropriate music for them.

The rejection of an opera, *Alfonso und Estrella*, and the failure of another, *Rosamunde*, in 1821, did not deter Schubert from continuing to compose for the stage. Two other operas, *Die Zwillingsbrüder* and *Die Zauberharfe*, had been staged in 1820, but without success. Schubert's music was brilliant, but he had been badly served by his librettists, and he never really mastered the technique of the stage.

His Highest Earnings

It was by his noble masses and exquisite songs that Schubert gradually won the reputation of being a worthy successor to Beethoven. His rewards were all too small in proportion to the immense amount of work, embracing every form of musical composition, which he accomplished. Throughout his life he never earned more than £100 a year.

Although he suffered much from poverty, Schubert did not care much for wealth. He was once offered a highly remunerative post as musical director at the Kärnthnerthor Theatre. A condition of the appointment was the suc-

cessful composition of some operatic scenes arranged for a special occasion.

Schubert composed a brilliant arrangement, but, on rehearsal, the soprano part was found to be so intricate that it could not be sung. Schubert, who was conducting, refused to admit that this was the case, and sat stolidly in his chair, while the unfortunate singer struggled with the impossible notes.

At last the manager appealed to Schubert, but in vain. A most uncomfortable situation arose. The manager walked round the stage consulting the principals in order to ascertain their views as to the possibility of the notes being sung, while Schubert remained perfectly motionless in his seat with his eyes fixed steadily on the score.

The Composer's Stubbornness

In the end, Schubert was again asked to modify his music, as everybody had agreed that it could not be sung. "I alter nothing," said Schubert, and, closing the music-book with a bang, he left the theatre. It was his last chance of holding a settled position.

His health had already broken down, and

SCHUBERT, GRIEG, AND GOUNOD

during the next two years he became steadily weaker. While in this delicate state of health, Schubert caught typhus fever, and died on the 19th November, 1828.

There are no reliable laws governing the physical and mental make-up of musicians. Schubert, with his stunted figure and puffy face—to which a squat nose gave a negroid appearance—his stumpy fingers, and his abrupt manners, impressed people as being the last person from whom divine music would flow as naturally and persistently as water from a spring. Edvard Grieg, on the other hand, both in general appearance and in personal characteristics,

THE CHOPIN OF THE NORTH



Edvard Grieg had delicate features and small blue eyes, the expression in them, according to an observer, "recalling the glance of a charming and candid child."

satisfies the most romantic conception of all that a musician should be.

"The Chopin of the North," as he has been called, had delicate features and small blue eyes, the expression in them, according to an observer, "recalling the glance of a charming and candid child." His thin hands, with their long fingers, were so pale and fragile as to impress people with their uselessness (especially as one had been badly crushed by a wagon), until the musician placed them upon the keyboard of the piano, and played a melody.

Edvard Hagerup Grieg was born on the 15th June, 1843, at Bergen. His ancestor, Alexander Greig, a merchant of Aberdeen, had emigrated to Norway after the battle of Culloden, in 1746. He changed his name to Grieg in order to conform to the Norwegian pronunciation.

Begins to Play the Piano

The Griegs flourished as traders, and, one of them having been appointed British consul, the post descended from father to son. By the time the musician was born, there was a settled estate which made his career possible.

The Scottish strain in the family had been diminished by intermarriage, and it was from his Norwegian mother, herself an accomplished musician, that Grieg inherited gifts that were speedily recognized and encouraged. Under her guidance he began, when only just six years of age, to play the piano.

Wish to be a Preacher

His first ambition, however, was to be a preacher. He used to stand on a footstool behind the big high-backed chair in which his father dozed after dinner, and deliver long sermons, announcing himself as the herald of a new era.

There is significance in the episode, for Grieg became a pioneer in music, breaking away from all tradition and creating a style so individual as to be inimitable. It was as a teacher and conductor, however, that he chiefly fulfilled his destiny as "the herald of a new era," educating the tastes of his pupils and audiences to the best possible music.

Grieg's Opus I, "Variations on a German Melody for the Piano," got him into trouble at school, where he was continually in disgrace for an idleness of disposition to which, in after life, he frankly confessed. He had brought the music to show his classmates, and, unfortunately, exposed it to the master's eye, who shook the young composer until he was black in the face, and told him in future "to leave such rubbish at home." It was Ole Bull, Norway's great violinist, who earnestly advised Grieg's parents to make their boy a musician.

"Parcel Stuffed with Dreams"

At Leipzig, where he went in 1858, feeling "like a parcel stuffed with dreams," Grieg made desperate attempts to throw off his constitutional indolence, and to face the drudgery of the academic routine. He succeeded, but at the cost of a serious breakdown in health, which left him with but one lung.

Returning to Bergen, Grieg fell completely under the influence of Ole Bull, who imbued him with his own almost fanatical patriotism and love of Norway's natural beauties. This had an important bearing upon Grieg's future. While in Germany he had come under the influence of Wagner, whom Ole Bull detested, and declared, "ought to be lodged in prison." Henceforward, Grieg devoted himself to the fostering of a national music.

Together with another brilliant young composer, Rikard Nordraak, he founded a concert society for the purpose of encouraging the work

WHERE MANY OF GRIEG'S LATER WORKS WERE PERFORMED

The Concert Hall and Theatre at Bergen, in which many of Edvard Grieg's later works were first performed. Though his claim to universal fame may rest chiefly on the wonderful "Peer Gynt" music, Grieg was none the less prolific in the composition of songs and pianoforte music, which breathed the very spirit of the beautiful rugged country of Norway.

of northern composers. It was not successful at first, but it prepared the ground for Grieg's lifelong efforts in the cause of Norwegian music.

One of Grieg's loveliest songs, "Jeg elsker dig" (I love thee), was composed in 1864, the year of his engagement to his cousin, Miss Nina Hagerup. The composer was not yet in a position to support a wife, and his prospective mother-in-law remarked contemptuously of the proposed match: "He is a nobody. He has nothing, and he writes music that nobody cares to listen to."

A Successful Concert

Soon afterwards Grieg gave a concert, at which only Norwegian music was played, including several songs and pianoforte sonatas composed by himself. The success of this led to his appointment as conductor of the Philharmonic Society at Christiania. He was now assured of a livelihood, and from the time of his marriage, in 1867, he was in constant demand, both as conductor and teacher.

In 1874 the Norwegian government granted Grieg a pension of 1,600 crowns a year, which enabled him to devote more time to original composition. The first fruit of his leisure was the wonderful music to Ibsen's "Peer Gynt," which was written at the dramatist's special invitation. Its success made Grieg world-

famous. He visited all the capitals of Europe, and was especially welcomed in England, where he conducted many concerts in London.

If Grieg's claim to universal fame rests chiefly on the beautiful "Peer Gynt" music, he was none the less prolific in the composition of songs and pianoforte pieces which breathe the very spirit of Norway. It has been said that in wealth of melody invention he ranks next to Schubert. His efforts to stimulate national music were unfortunately not very productive of results. His very individuality made him an extremely difficult example to follow.

Expression of Rare, Poetic Emotion

Almost exotic in his expression of rare, poetic emotion, which is nevertheless inspired by love of his country and its spiritual consciousness, he will always stand alone as the pioneer of a movement which did not extend farther than his own activities. He died at Bergen on the 4th September, 1907.

The lives of Schubert, Grieg, and Charles François Gounod are, in some respects, closely similar. Like Schubert, the French maestro devoted a great part of his genius to the stage and to the composition of religious music; he was also a prolific composer, and sprang from poor parents. Like Grieg he owed his early musical education to the care of an indefatigable

mother, and achieved fame by a single, outstanding effort.

He was born on the 17th June, 1818, in a humble apartment in the Rue de l'Éperon, in the district now known as Old Paris. His father was a painter, who relied for his livelihood chiefly upon commissions to restore old pictures at the Versailles Gallery. He died while Gounod was still at an early age.

Gounod made sacrifices in the cause of musical art that many people would think premature and unnecessary, for his mother, we are told, rocked him to sleep, "not with silly nursery songs, crooned in shrill and vulgar tones, but with the intervals of the scale, the perfect

A TALENTED MUSICIAN OF FRANCE



It was only after the production of *Faust* that Charles Gounod received rightful recognition from the public as being a composer of no small consequence.

and imperfect concords, and the discords followed by their natural resolution."

As a result of this training, "le petit musicien," as the two-year-old Gounod was called, could exclaim, during his walks in the street, "that dog barks in soh," or that the notes on which a hawker-woman announced carrots and cabbages for sale formed a discord.

Gounod wished to take holy orders, and his first compositions were entirely religious in character. In 1839, however, he won the "Grand Prix de Rome," which carried with it an income of 4,000 francs annually for four years. This piece of good fortune decided Gounod to write operas.

Sappho was produced at the Académie Nationale de Musique, in 1851, and its composer received the following wise commendation from a leading critic: "This opera will win for M. Gounod the sympathy of artists and a discreet fame that will enable him to try his luck a second time with better chances of success."

Some choruses for Ponsard's tragedy *Ulysse*, played at the Théâtre Français, in 1852, further enhanced Gounod's reputation, but two more operas, *La Nonne Sanglante* (1854) and *Le Médecin Malgré Lui* (1858), turned out to be both comparative failures.

Long Contemplated Project

Encouraged by Madame Viardot, whose friendship supported him during a time of much suffering, due to the blindness of his mother and the death of a favourite brother, Gounod tried once again. He had long contemplated the composition of music to *Faust*, but had not been able to find a suitable librettist. One day he discovered, by chance, that his former collaborator, the poet Jules Barbier, whose genius seemed better fitted for operas of a light character, also secretly cherished an ambition to take an operatic poem from *Faust*.

Despite the fact that two such great men as Goethe and Berlioz had already laboured successfully at the *Faust* legend, the two friends set about their task, full of hope. When the opera was completed, it proved to be so revolutionary in design that, although the management of the Théâtre Lyrique accepted it for production, they did all they could to persuade the authors to modify the treatment.

Most Popular French Opera

Although it was not an immediate success, *Faust* gradually won favour with the public, and became the most popular French opera of the nineteenth century. Gounod followed it up by *Phlémon et Baucis* (1860), *La Reine de Saba* (1862), *Mireille* (1864), and *Romeo and Juliet* (1867). He also wrote a number of songs and masses, the best known of the latter being "The Redemption" (1882).

Gounod does not rank among the greatest musicians, but he was a great and conscientious artist. His strength lay in dexterity rather than in the broad creative sweep of the masters, but the passion that inspired his work was genuine. He painted the emotions in glowing colours, only, as he himself said, "The richest palette is a lifeless thing until the hand and brain of the painter warms the colours into life." He died at St. Cloud on the 18th October, 1893.

[See "Schubert," by H. F. Frost (Great Musicians, 1881); "Edvard Grieg," by H. T. Finck (Living Masters of Music, 1907); and "Charles Gounod," by Marie Anne de Bovet (1891). Also the Hon. W. Hely Hutchinson (translation: 1896).]

READER of the STORY in the ROCKS

Hugh Miller, the Learned Stonemason of Scotland, Who Devoted All His Spare Time to the Study of Fossils and so Became an Expert Geologist

WE live in an age of travel and discovery. Men have been to the North Pole and the South Pole, and explorers have penetrated into savage and distant lands, and brought back to us not only fascinating and accurate descriptions in the form of narrative, but also photographs and cinematograph films, which bring these strange countries and their inhabitants to our firesides. And yet it has often happened that very important and interesting discoveries in science have been due to the researches of stay-at-home people.

Hugh Miller, the Scots geologist, is a striking instance of a scientific investigator who made geological discoveries of great interest and importance while he was living in obscurity and obliged to confine his field of investigation to one locality. As he says himself in one of his books, in his study of fossils on the shores of the Cromarty Firth, he found within the limits of the parish work enough for the patient study of many years.

The life of Hugh Miller possesses a twofold interest—it makes an appeal to the lover of science, and also to the student of human nature. He has told his story himself in "My Schools and Schoolmasters," one of the most interesting autobiographies ever written, and highly praised by Thomas Carlyle as such.

Born at Cromarty, on the 10th October, 1802, his earliest memories were of the sea. His father was the owner of a small trading sloop, and was drowned at sea when Hugh was only five years old. The sailor left three children—a son and two daughters—and the widow had a hard struggle to bring them up. She was greatly aided by her two brothers, and these men had much to do with moulding the character of their fatherless nephew.

There was a great contrast between these two men. James Wright, the elder, a harness-maker, was a humorous man, a keen antiquary, and an assiduous collector of old local legends. The other, a cartwright, was a grave fellow, who had sailed with Nelson and fought on land

and sea, surviving all perils, returning finally to the little wind-swept town of Cromarty with a nest-egg of prize-money and "heartily sick of war and bloodshed."

Under the eyes of these high-principled and kindly men, Hugh Miller was warmly encouraged to indulge his natural bent for reading. As soon as he could read at all, he used to sit for hours beside the work-bench of his uncle, the harness-maker, reading aloud "Jack the Giant Killer" and similar books. His uncle in turn would regale the boy with wonderful old traditional stories of the Highlands.

It was Uncle Sandy, the sailor, who first awakened Hugh's interest in natural history. Indeed, the first ammonite the boy ever saw was one that this uncle had brought home from the Mediterranean. Every Sunday evening Hugh attended at his uncle's home to be catechized in Scriptural knowledge in the old Scots fashion, for both these men held that the Sabbath School was an expedient devised for parents who were too indolent or ignorant to teach their children themselves. The range of reading and instruction which these two working

men brought within the reach of their nephew was astonishing—extending from the Bible to the "Iliad" and the "Odyssey," and including the voyages of all the great sailors.

Hugh Miller was first taught at a dame's school, and afterwards at the parish school of Cromarty, which, although only a straw-thatched cottage with a mud floor and no ceiling, was in charge of a master who was a university prizeman in mathematics and languages, and who could boast that no schoolmaster in the north had ever sent more boys to college.

Among the curious recollections which Hugh Miller gives of this school is the fact that one of its endowments consisted of twenty peats from every peat boat that entered the harbour of Cromarty—and such boats were many. Some of the boatmen attempted to evade this toll, and then the schoolmaster would send a

AUTHOR AND GEOLOGIST



Though Hugh Miller received a good schooling, it became necessary for him, through financial reasons, to start life as a quarryman.



party of boys to collect it, or, failing that, to commandeer an oar or a spar, or anything they could lay hands on. Such property was then kept in the school until its owners paid up. An important yearly event was the school cock-fighting tournament, after which the floor below the desks would be deeply stained for weeks with the blood of the gallant birds.

When quite a boy Hugh Miller searched out all the working men in Cromarty who possessed books—and several of them, who did not earn a pound a week, had libraries of eighty volumes or more—and in this way he greatly extended his reading. Years afterwards Miller stated that he considered the grand acquirement of his life was his mastery of the art of holding converse with books.

He was still a schoolboy when he began to explore among the rocks along the seashore near his home, armed with a hammer about

to trifle; and when, long after, I learned to detect old marine bottoms far out of sight of the sea—now amid the ancient forest-covered Silurians of central England, and anon opening to the light on some hill-side among the Mountain Limestones of our own country—I have felt how very much I owed to his instructions.

Another favourite hunting-ground of the youthful naturalist was a place near Cromarty where an ancient bog had been released by a flood, opening a channel about twelve feet deep through the lower end of the surrounding morass. Here the boy found, exposed to view, trunks of trees that had been buried in the bog for thousands of years, and his digging unearthed handfuls of nuts and acorns, black as jet, and even antlers of elks and other animals that had long been extinct in Scotland.

As a schoolboy Hugh Miller was less happy at the desk than when exploring the caves on the coast line near Cromarty or clambering about the cliffs, but he found other teachers

besides his excellent schoolmaster. One of his companions on the seashore was an old soldier, who had fought under the Duke of Wellington, and one day Hugh guided the infirm pensioner's hand, while he wrote a letter to the duke. This letter brought a kind reply, with much good advice, which, unfortunately, the old soldier did not follow. Among other links with the distant past, Hugh Miller had spoken to two men who had fought at Culloden, and also to a number of others, including his own grandfather, who had witnessed the battle from a safe distance.

After he left school, although his natural inclinations all pointed to science and literature, Hugh Miller felt obliged to become a manual labourer. His uncles urged him to continue his education, offering to

stint themselves to send him to college, but the lad did not feel any ambition to train himself to be a doctor, lawyer, or minister—at that time the goals of most Scots lads who went to college. He, therefore, became a mason, a choice that proved to be a wise one, for, as Miller himself says, "it was the necessity which made me a quarrier that taught me to be a geologist."

Miller was singular as a mason, as he had been when a schoolboy—always carrying a book in his pocket, and seeking his enjoyment in solitary walks. He was constantly chipping open pieces of stone in search of fossils, and in the dinner-hour in the quarry he would show his finds—scales of fishes, shells, ammonites, and the impressions of ferns. His companions often expressed their curiosity as to how such

AN HONOURED COTTAGE IN CROMARTY



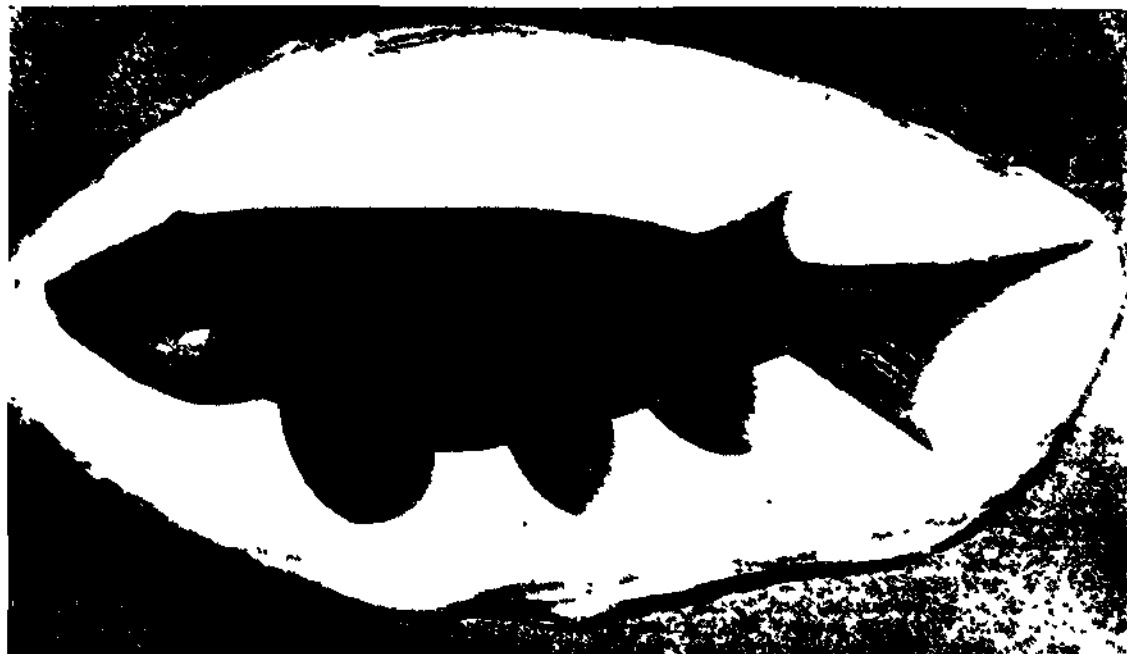
In the little Scottish village of Cromarty, almost at the foot of the Old Red Sandstone pillar erected to the memory of Hugh Miller, stands the humble cottage in which the author-geologist was born.

100 years old, which he had picked up. Soon his great interest in geology was observed even by the farm-servants, who came to the shore with carts for seaweed, and who asked Hugh if he was finding money in the stones. In these expeditions he was often accompanied by his sailor uncle, of whom Hugh Miller said that some professors of natural history knew less of living nature.

One of the first definite studies that Miller made was in observing the habits of crabs and lobsters, about which his uncle possessed a great deal of knowledge, gained by years of hunting these creatures. Describing these excursions and lessons, Miller wrote:

The tract of sea-bottom laid bare by the ebb formed an admirable school, and Uncle Sandy, an excellent teacher, under whom I was not in the least disposed

AN EARLY DENIZEN OF THE DEEP BLUE SEA



The *Cheirolepis*, or scaly pectoral. "The same astonishment," wrote Agassiz, "that Cuvier felt in examining the *Plesiosaurus*, I myself experienced when Mr. H. Miller, the first discoverer of these fossils, showed me the specimens which he had detected in the Old Red Sandstone of Cromarty." The plates which illustrate Miller's book, "The Old Red Sandstone," give a clear idea of these curious fossil fishes, which appear in the Upper Devonian period.

things had "got into the stones," but they also indicated that such things were beneath the notice of grown men.

There was one workman who told Miller that in his father's time he had known people search the beach for "thunderbolts," which they used for curing bewitched cattle. Ascertaining the spot where these things had been found, Miller went there on his next half-holiday, and found a Liassic deposit, which was immensely rich in fossils.

Miller was seventeen when he was apprenticed to a stonemason, and for fifteen years he continued to follow that trade. His wages were small, and he lived a very plain and laborious life; but he never relaxed his efforts at self-improvement, reading all that was best in English literature, and studying geology without a teacher.

The Inconveniences of Bothies

Living as he did in a sparsely populated part of Scotland, Miller and his companions usually practised their trade in the heart of the country. Most of their work consisted in setting up farm buildings, and, when employed on such jobs, the workmen were accommodated in the bothy attached to the farm. Some of these wretched places were unfit for the housing of cattle. Many a time was Miller awakened by the rain dropping on his face

from the roof, and sometimes he could see the stars through the rotten thatch.

The men occupying these bothies had to do their own cooking. The usual breakfast and supper was porridge and milk, and oatcake and milk served for the mid-day meal. Sometimes, as Miller says, he and his companions could not even procure salt for their porridge, and in times of heavy rain they could not cook their food at all, because the turf, which was the only fuel, was too wet to burn.

The Solace of Nature

In these hard circumstances Miller turned to Nature for solace, and there, he says, he found ample compensation for all his hardships. He was allowed no half-holiday—such a luxury for a working man was almost unheard of at that time—but every evening the young mason naturalist wandered through the woods, or across the moors, or by the seashore. After darkness fell, he would read by the light of the fire, even a candle being a luxury.

His trade took Miller all over Scotland, and, wherever he happened to be, he studied the local geology as well as he could. One of his most interesting experiences as a journeyman mason was a period of employment in Edinburgh, where his fellow-workmen looked askance at him as a "Highlander newly come to Scotland."



In his walks out of Edinburgh Miller found himself in the neighbourhood of ocal-pits, and there, on the banks of the unlovely slag-heaps, he was introduced to the wonders of another world. Breaking open the blocks of shale with his hammer, he was astonished to discover the fossilized ferns and other vegetation of the Coal Measures. No one, seeing the young man in rough working clothes cracking open the blocks of shale on the slopes of a colliery rubbish tip, could have imagined that in fancy he was picturing the ancient world and its gigantic vegetation, whose destruction and decay stored up the wealth of coal in the bowels of the earth.

A Vision of the Ancient World

He thus describes the play of his imagination on such occasions:

Amid forests of arborescent ferns, and of horse-tails tall as the masts of pinnares, there stood up gigantic club-mosses, thicker than the body of a man, and from sixty to eighty feet in height that mingled their foliage with strange monsters of the vegetable world, of types no longer recognizable among the existing forms—sculptured ulodendra, bearing rectilinear stripes of sessile cones along their sides, and ornately tattooed sigillaria, fluted like columns, and with vertical rows of leaves, bristling over their stems and larger branches.

At this period (1825) Hugh Miller describes himself as earning high wages—twenty-four shillings a week, paid fortnightly. For this he had to work sixty hours a week. His lodging was a one-roomed cottage, shared with three other men. Yet even there he continued to write a great deal in the evenings on a little table in a corner, and he had a library of about thirty volumes, picked up at second-hand bookstalls during his walks in Edinburgh on Saturday evenings. During these walks Miller confesses that he often lingered in Castle Street, opposite Sir Walter Scott's house, hoping to catch a glimpse of the great man, but in this he was never successful.

Threatened with Consumption

Happy though he was, there was one dark cloud on his life. By inhaling the stone-dust raised by the chisel in hewing masonry, his lungs had become affected, and for a time he feared consumption, and had to return to the more bracing air of his native Cromarty to recuperate.

During the spring following his return from Edinburgh Miller took up an occupation, which, though strangely out of keeping with his abilities and aspirations, was far healthier than stone hewing. He began to fashion and cut inscriptions on gravestones. Of this work he says, with pardonable pride, that he introduced a better type of gravestone into the north of Scotland, and his lettering also was superior to the inscriptions usually found in that locality.

He was now his own master, and the new occupation proved less trying to his lungs than working with gangs of men in the dusty environment of a city building in course of erection. He found a solitary burying-ground, embowered amid old trees, "a much more delightful scene of labour than a dusty workshop," and, all things considered, his new mode of life was a "quiet and happy one."

It was while engaged in cutting inscriptions on gravestones that Miller published anonymously, at his own expense, a volume of poems. These he had to admit to himself, even when they were going through the press, possessed little merit; but he was more successful in another venture, this time in prose. He wrote a series of letters to a Scottish newspaper on the herring-fishing industry, which contained a great deal of first-hand information. These letters were afterwards reprinted in pamphlet form, and attracted considerable attention, Sir Walter Scott even writing to the publisher for a copy when the pamphlet was out of print.

Becomes Accountant in a Bank

This humble but well-deserved success put Miller on the right course. Realizing that he was no poet and that he did not possess the equipment necessary to become an imaginative writer, he resolved that he would qualify himself to "stand as an interpreter between nature and the public." He continued, however, with his gravestone work for several years, until, in the latter part of 1834, he was offered a position as accountant in a newly opened branch bank in Cromarty. This new occupation offered advantages, and so, after fifteen years, the mallet and the chisel were laid aside in favour of the pen and the ledger.

Shortly after joining the bank, Miller published a volume of "Scenes and Legends of the North of Scotland," which, although it did not sell very well at first, attracted the attention of several discerning critics. Leigh Hunt, in reviewing it, described the author as "a remarkable man, who will infallibly be well known." This volume was written in that easy and fluent style, which afterwards characterized all Miller's writings.

Writing for the Press

Success was slow in coming to him, and even after his marriage in 1837 to Lydia Falconer Fraser (who wrote children's books under the name of "Harriet Myrtle") his income did not amount to two pounds a week. In the leisure that remained to him after his day's work in the bank, Miller occupied himself in writing for the press, and many of his early essays appeared in *Chambers's Journal*, then edited by its founder—like Miller, a self-made man—Mr. Robert Chambers.

To his first love, geology, Miller was never unfaithful, and his chief recreation during the time he was employed at the bank was exploring an ichthyolitic deposit of the Old Red Sandstone within a short distance of his bank-counter. He says that a patch of this deposit, little more than forty yards square, never failed to furnish him with fossils at every visit during a period of ten years.

These fossil remains consisted of fragments of very ancient forms of fishes—so ancient, indeed, that when Miller began to attempt to reconstruct the creatures from their fragments, he could discover no living types upon which to model them. When he found a head and a body and a tail of the same fish, they joined up perfectly, but the complete fish was quite unlike any ever seen by the fishermen of the Moray Firth, or, indeed, by the fishermen of any other sea-shore. Vertebrates they undoubtedly were, but they had no internal skeleton—their bones were on the outside, not the inside.

I could find (wrote Miller) no living analogues for them; and so, in my often-repeated attempts at restoration, I had to build them up plate by plate, as a child sets up his dissected map or picture bit by bit—every new specimen that turned up furnishing a key for some part previously unknown—until at length, after many an abortive attempt, the creatures rose up before me in their strange unwonted proportions, as they had lived, untold ages before, in the primeval seas.

Louis Agassiz, the great Swiss naturalist, and perhaps the foremost authority on fossil fishes and geology at that time, was astonished by the strange forms of the fossils discovered by Hugh Miller. "The same astonishment (wrote Agassiz) that Cuvier felt in examining the *Plesiosaurus*, I myself experienced when Mr. H. Miller, the first discoverer of these fossils, showed me the specimens which he had detected in the Old Red Sandstone of Cromarty." The plates which illustrate Miller's famous book, "The Old Red Sandstone," give a very clear idea of the extraordinary structure and shape of these curious fossil fishes.

Miller's head was not turned by his important discoveries, or by the attention they received from scientists. He remarked that he could be credited only with patience, and, for the encouragement of others, contended that patient research might often be capable of making even greater discoveries than genius. In order to pursue his geological explorations on outlying reefs, he purchased a small boat, and he would often start on a geological excursion as early as two o'clock in the morning, and be back and at work in the bank before ten.

At a conference of the British Association, held in Glasgow on the 23rd September, 1840, one of the meetings was devoted to Hugh Miller's discoveries. Sir Charles Lyell (who was in the chair), Agassiz, Mr. (afterwards Sir) Roderick Murchison, and William Buckland, four of the world's foremost geologists, all joined in eulogizing the researches of the Cromarty ex-stonemason.

On this occasion Murchison said that he had seen some of Mr. Miller's papers on geology, and that they were written in a style so beautiful and poetical as to throw plain geologists like himself into the shade. Dr. Buckland stated that he had never been so much astonished by the powers of any man as he had been by the geological descriptions of Hugh Miller. He also remarked that he would give his left hand to possess such powers of description as had made him feel ashamed of his own descriptions, although the latter had cost him long hours of labour. Agassiz, on

being requested to give a scientific name to one of Hugh Miller's fossil fishes, gave it the name of *Pterichthys Milleri*.

This was, indeed, high praise for a working man, long buried in obscurity, to receive from the most eminent geologists of his day. Yet such was the natural ability of Hugh Miller that during the very same year he had also achieved distinction in another field, that of journalism.

A religious controversy was in progress at

FOUND IN HIS MUSEUM



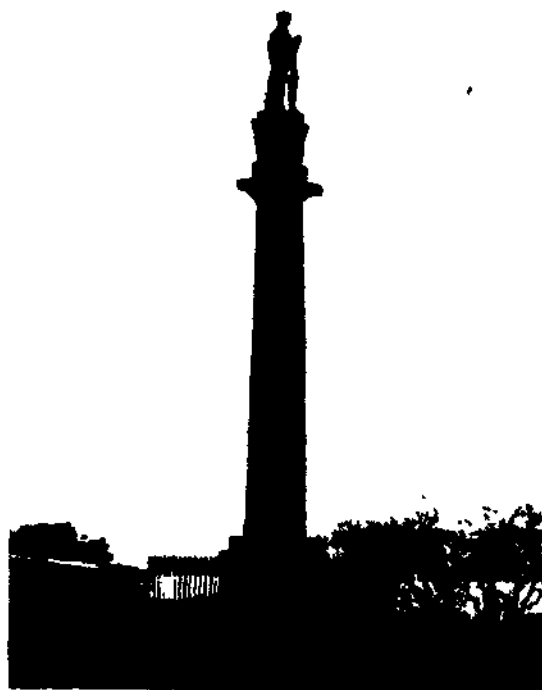
The *Coelacanth*, a fossil fish discovered by the Swiss naturalist Agassiz. This illustration is from an unfinished restoration found in Hugh Miller's museum.



that time in the Church of Scotland, and when a journal was established to represent one set of views, Hugh Miller was appointed its first editor. This journal, *The Witness*, under his guidance, was not only a success from the point of view of its promoters, but it also attained high rank as a literary production.

Among the numerous articles which Miller wrote for *The Witness* was a series of sketches on popular geology, written, like all his prose, in an extremely interesting and attractive style. These sketches were afterwards collected, added to, and published in volume form, under the title, "The Old Red Sand-

RAISED TO HIS MEMORY



Of the several monuments to the memory of Hugh Miller, perhaps the most fitting is the high column of Old Red Sandstone, erected at Cromarty, his birthplace.

stone." This work was first published in 1841, and the author dedicated it to Murchison, who, he gratefully acknowledged, had noticed and encouraged him when "prosecuting my humble researches in obscurity and solitude."

Few men have succeeded so well as Hugh Miller in writing a scientific work that the unlearned can read with enjoyment and profit. There is a great deal of shrewd common sense in Miller's writings, and the following quotation from the first chapter of "The Old Red Sandstone" will serve to indicate the purpose

behind all he wrote. There was nothing of the intellectual snob about Miller, and he was always seeking to encourage other working men to seek happiness and wisdom in studying nature, and to employ their leisure in the cultivation of their faculties:

There is none of the intellectual, and none of the moral faculties, the exercise of which does not lead to enjoyment; nay, it is chiefly in the active employment of these that all enjoyment consists; and hence it is that happiness bears so little reference to station. It is a truth which has often been told, but very little heeded or little calculated upon, that, though one nobleman may be happier than another, and one labourer happier than another, yet it cannot be at all premised of their respective orders, that the one is in any degree happier than the other.

"The Newspaper Editor Writes in Sand"

Miller was thirty-eight years of age when he left the bank at Cromarty for the editor's desk in Edinburgh. He made the change with regret, not only because he would henceforward have little time to spare for his favourite study of geology, but also because he felt that he would never be able to make any enduring contribution to literature, fully employed as he felt he would be in religious controversy. "The newspaper editor," he remarked, "writes in sand when the tide is coming in."

As a matter of fact, it was after he became an editor that he wrote the two books upon which his fame chiefly rests to-day—"The Old Red Sandstone" and "My Schools and Schoolmasters." He never relinquished his interest in geology, even when engaged in the most strenuous literary labour in connexion with his paper, and amid all the anxieties that led eventually to the disruption of the Established Church of Scotland.

Refuses to Forsake Geology

These events and the changes that followed imposed a great strain upon Miller's strength, but again and again he returned to his first love—geology. He wrote a very profound work, "The Footprints of the Creator" (1849), while other geological papers were published after his death, among them being his book, "The Testimony of the Rocks" (1857).

Miller's lungs had been seriously affected in his stonemason days, and his constant literary labours in later years made great inroads upon a constitution already enfeebled. More than once he had been attacked by inflammation of the lungs. His life ended in tragedy, for at last his overtaxed brain gave way, and he died, by his own hand, at Portobello, on the 23rd December, 1856. There are several monuments to his memory, including a high column of Old Red Sandstone at Cromarty.

[See "The Life and Letters of Hugh Miller," by Peter Bayne (1871); and "My Schools and Schoolmasters," by Hugh Miller (1854).]

RIVALS *Whose NAMES are LINKED*

How Corneille and Racine Rose to Great Heights of Poetic and Dramatic Expression and Became Masters of a Forceful Type of Drama Now Obsolete

IN the spring of 1629 a love-sick French lawyer sent some verses to a young lady. There was nothing remarkable in this circumstance, and the verses were not epoch-making. What was remarkable was that the young poet presently expanded his verses into a five-act play, to which he gave the title of *Mélite*.

He offered the play to a troupe of actors in Paris, who performed it with great success. But when Mademoiselle Milet heard of what had happened, she considered that her feelings had been trifled with and refused to have anything more to do with her admirer.

Thus Pierre Corneille won fame and lost love. Later on in life he married and became the father of a family, but he seems always to have been happier at making love in rhyme than in reality, for he says:

In the art of making love,
how various is my skill;
I write it pretty well, but
I make it very ill.
I have a facile pen, but a
most unready tongue;
Gay enough on the stage, at
home I'm always wrong.
Few can listen to me long
and not show that they
are bored
Till my sighs and my
whisperings from other
lips are heard.

Some of Corneille's critics added insult to the injury done to the inspirer of *Mélite* by declaring that the play was "wanting in interest." But this was because the language used by Corneille was simple and unaffected, in contrast to the high-flown rhetoric employed by other dramatists, while the action, instead of dealing with extravagant situations, told a simple tale. Corneille had accidentally struck a new note in French drama.

The young dramatist was sufficiently elated by the success of his play—which, as he observed afterwards, was not written according to the rules because he did not then know any rules—to devote himself to the new profession and abandon the law, which he detested. It was a bold decision, for in those days dramatists were

socially of no importance and made very little money. They were classed as actors and received the same salary as the rest of the company.

Fortunately, Corneille could afford to wait for commercial success. He was born on the 6th June, 1606, and was the son of Pierre Corneille, the master of the "waters and forests" in the *vicomté* of Rouen, an office which carried with it the powers of a magistrate and considerable influence at Court.

THE LAWYER DRAMATIST



Corneille still ranks as one of the greatest dramatists. By making his characters act with less restriction he came very near to the freedom of the English drama.

Corneille received his early education at the Jesuit College, Rouen, and was sworn in as an advocate as early as his eighteenth year. His father then bought him a judicial appointment which, however, Corneille did not take very seriously. He was too timid and awkward by nature to make a good lawyer, but he was already an excellent scholar, having won prizes at school for translations of his favourite authors, Lucan and Seneca.

In spite of the disgust of his friends, Corneille proudly announced that he intended "to make a living for the mountebanks." He lived to see the cynical part of his prophecy reversed,

for, although he did not make a fortune, he was one of the first French dramatists to receive "royalties" and to earn a respectable income from his profession.

"Monsieur Corneille has done us great harm," declared a jealous actress. "We formerly bought our pieces for three francs a night. Everybody was accustomed to this arrangement and we used to make money. Now M. Corneille's plays cost us a great deal, and we make very little."

Corneille's earlier plays, *Clitandre* (1632), *La Veuve* (1633) and *La Suivante* (1634), made him the lion of Parisian society; he was flattered and fêted in drawing-rooms and at Court, thus presenting the astonishing phenomenon

of a fashionable playwright. But these plays were immature efforts, and not those upon which their author's real fame rests.

Nevertheless, when *La Veuve* was first printed, Corneille was able to publish as an appendix to the volume no less than twenty-six complimentary sonnets addressed to himself. Meanwhile a Latin elegy, written on the occasion of Cardinal Richelieu's visit to Rouen in 1634, led to a friendship with that great, though exacting, patron of the drama, whose lightest word was sufficient to make or mar a reputation.

Richelieu was anxious to be considered a dramatist, but no amount of wealth and power could give him the genius he lacked. To console himself, he dictated to the brilliant men whom he gathered round him about the subject, and treatment of plays, some of which he then put forward as his own.

Alters the Cardinal's Play

Most of Richelieu's dramatists were only too glad to let their patron take credit for what he had not done, but Corneille was rash enough to alter a scene in one of the Cardinal's plays, and so incurred the latter's severe displeasure.

Such a *faux pas* would have been enough to ruin the career of a lesser dramatist, but Corneille easily survived it. His new play, *The Cid* (1635), based on a Spanish legend, created an enormous sensation, and, although Richelieu ordered the critics to condemn it, the French public took Corneille to their hearts.

The Cid made history, not only on account of the jealousy that it aroused on the part of Richelieu and the conventional dramatists of the day, but because it was a genuinely popular play and could be understood by the people. Although it speedily became a classic, it was opposed to the formal classicism of the times, which demanded artificial sentiment, stilted dialogue, and rigid adherence to fixed rules, particularly those governing the observance of the "unities" of time and place.

By making his characters feel and act with less restriction, Corneille came nearer to the freedom of the English drama. Although his plays seem to us to-day to be couched in the "grand" manner, they contain much genuine poetic and dramatic expression, and, in choice of subject and invention of dramatic incident, Corneille still ranks as one of the greatest dramatists of all time.

Marks Time for Four Years

So long and furiously did the critical war aroused by *The Cid* continue, that Corneille shrank from aggravating it by a fresh example of his work. His next play, *Horace*, did not appear until nearly five years later (1640).

The printed version of it contains a dedication to Cardinal Richelieu, which seems to show that Corneille was well aware of the chief source of the animosity directed against him, and hoped to avoid further trouble.

Richelieu, easily softened by this flattery, extended an olive branch in the shape of an annuity of 500 crowns, and the great controversy came to an end. In the same year (1640) Corneille wrote two more tragedies, *Cinna* and *Polyeucte*, in both of which his dramatic genius was exhibited at its highest.

First Play with a Moral Purpose

In *Polyeucte*, however, which is a drama dealing with the conversion of a pagan nobleman in early Roman times, Corneille first showed himself as a dramatist with a moral purpose. This did not altogether suit the tastes of his former admirers, especially the ladies and gentlemen of the higher walks of society, where the poet had been a privileged guest. They would have preferred the dramatist to be a little more sparkling and less didactic.

Corneille, in fact, was never successful as a "lion," being neither witty nor graceful in speech. It was said of him that "his conversation was so heavy that it soon became extremely wearisome." When told of this by his friends, Corneille, however, merely smiled and remarked, "I am none the less Pierre Corneille."

In 1647 Corneille was elected a member of the French Academy; further plays—the best-known being *Le Menteur* (1643), *Rodogune* (1644), and *Théodore* (1645)—having firmly established his reputation, although there was not perhaps the fire in them that had burned so fiercely in his earlier years.

Pertharite (1652) was so poorly received that Corneille retired from the stage in disgust. "It is better," he announced, "that I should take my leave of the theatre of my own free will than that I should be told to do so; and it is only fair to expect that after twenty years of work I should begin to perceive that I am getting too old to be still in demand."

Difficulty of Retiring from the Stage

But he could not so easily desert a vocation which he had originally adopted as a means of subsistence, and his success in which had given rise to the taunt,

Corneille is fine, but he sells his pages;
Rotrou writes well, but he writes for wages.

He undertook to translate "The Imitation of Christ" by Thomas à Kempis, but, although the publication of this translation proved a remarkable success, Corneille was obliged to come back to his profession. None of his further plays, however, was successful, and

CORNEILLE'S DWELLING-PLACE AT PETIT COURONNE



A house where Corneille once lived, at Petit Couronne, now used as a museum. While at the height of his fame, the great French poet and dramatist received enough money to enable him to live quite comfortably. During the latter part of his life, however, he wrote nothing, and, in consequence, was often reduced to beggary.

each one showed further evidence of failing powers.

France, in fact, did not know whether to laugh or cry over the mechanical performances of the once great Corneille. Unhappily, the tragi-comedy continued for many years, and at last became entirely a tragedy. "My friend Corneille," wrote Molière, "has a familiar who inspires him with the finest verses in the world. But sometimes the familiar deserts him, and then he fares very badly."

Privations of His Declining Years

During the last ten years of his life the aged poet wrote nothing, and was often reduced almost to beggary, owing to the irregularity with which his small civil list pension was paid to him. For four years he received nothing, and it was only through the sacrificing action of another poet, Nicolas Boileau, who insisted that his own pension should be paid

to Corneille, that the latter was saved from starvation.

One day a friend met Corneille in the street and invited him to dine. On the way to the restaurant, the poet entered a cobbler's shop in order to have some stitches put into his worn boot. For this he paid three francs, explaining that it was all the money he had.

His Sturdy Independence

He refused, however, to take money from his friend, and to the end he retained that high sense of dignity and independence which had enabled him to write the words that are now engraven upon the bust of him near his house in Paris:

To myself only I owe my whole renown.

He died on the 30th September, 1684.

During the sad years of Corneille's decline, another dramatist, many years his junior, was

rapidly coming to the forefront and rivalling his fame. Unlike his contemporary in many respects—particularly in regard to personal characteristics, for he was witty and lively, while Corneille was dull and stolid—Jean Racine resembled him as a portrayer of serious human character and in his resentment of unjust criticism.

Racine was born at La Ferté Milon, France, in 1639, probably on the 21st December. His father held the important post of salt-tax collector for the department of Aisne, and moved in high social circles. Racine was

WHERE CORNEILLE LIES BURIED



It was not until over a hundred years after his death that a monument was raised to mark the last resting-place of Corneille in the church of St. Roch.

quickly bereft of both parents, his mother dying two years after his birth and his father only surviving her a short time.

Until he was ten years old Racine was cared for by his grandparents, who were devout old folk connected with the monastery of Port-Royal, an institution which had been founded in the thirteenth century for the benefit of women who were desirous of retiring from the world without necessarily taking formal vows. The inmates took charge of the education of children, and Racine, after a short period of ordinary schooling at the grammar school at Beauvais, was admitted as a pupil.

Port Royal is famous for the religious con-

troversies that took place there and spread throughout France. These do not concern Racine, except that he was taught by the wise and learned men who took part in them, and who influenced the young poet in a manner that was to last all his life.

One day Racine was discovered by one of his tutors reading a Greek love story. Thinking this unsuitable matter for his pupil, the tutor took the book away and threw it into the fire.

How He Hoodwinked His Tutors

Racine, however, procured another copy and was again discovered. The second volume was destroyed, but the eager reader contrived to come by another one. He then learned the story by heart, and, taking the volume to his tutor, remarked, "You may now burn this one as you have burnt the others."

His teachers at Port Royal loved him, we are told, "for the affectionate seriousness of his character," but "when they saw him wander, Sophocles or Euripides in hand, among the shadows of the abbey, anxiety took possession of their hearts, and when they learned that he secretly indulged in the sinful pastime of making verses, they even thought it necessary to punish their favourite."

Racine dared not confess to his ambition to write for the stage. After a short period of study in philosophy and logic at the Collège d'Harcourt in Paris, he was sent to join the household staff of the Duke de Luyues, where his cousin, Nicolas Vitart, was also employed.

The duke owned property at Chevreuse, and, strange to relate, the young poet was sent to superintend the building operations going on there. He found his work of giving orders to bricklayers, carpenters, and glaziers very uninteresting, although, as he wrote to his cousin, "they obey me very well." He consoled himself for his uncongenial task by reading and writing poetry.

Writing a Marriage Ode

His first long poem was an ode written on the occasion of Louis XIV's marriage, for which he received 100 louis d'or. Chapelain, the great critic, praised the verses, but pointed out one or two errors in mythology, such as that Tritons lived only in sea and not in rivers, as Racine had suggested in his poem. "Whatever they are," observed Racine humorously, "I have wished them all drowned a dozen times over for the trouble they have given me."

Racine's growing reputation as a man of letters caused his Port Royal guardians grave concern. Taking advantage of the poet's temporary depression over the rejection by the actors of his first play, *Amasie* (1660), they persuaded him to take orders. But Racine never entered

the Church, although at one time only an accident prevented him from being ordained.

He left Paris to stay in the south of France with his uncle, who was vicar-general of Uzès, and who had made arrangements for his nephew's entry into the Church. The hitch in the proceedings was due to the negligence of another uncle, who omitted to provide Racine with a letter from the bishop of his own diocese authorizing another bishop to consecrate the young candidate for holy orders.

Escapes Entering the Church

But for this circumstance there is no doubt that Racine would have entered the Church. The particular opportunity passed, and although the poet continued to study theology, and his uncle did all he could to obtain him a benefice, even offering to sacrifice his own, other influences prevailed, and, to the great consternation of the Port Royalists, Racine became a dramatist.

His first important drama, *La Thèbaïde*, was played by Molière and his company at the Palais Royal Theatre in Paris on the 20th June, 1664. It was instantly recognized that a serious rival to Corneille had appeared, a dramatist who worked in much the same *mêner* as the latter, but whose poetic diction was superior in style and force.

Molière had great faith in his new recruit. The brilliant playwright, actor, and stage manager encouraged Racine, gave him the benefit of his own vast experience, and even, it is said, lent him money. Racine's conduct in regard to his next play, *Alexandre le Grand* (1664), was, therefore, singularly ungracious, for, while Molière's company was performing the play at their theatre, the dramatist permitted another company to perform it simultaneously at the theatre of the Hôtel de Bourgogne.

Action Difficult to Pardon

Racine's excuse was that his play was being badly acted by Molière's company. But this, taking into consideration the latter's reputation, seems scarcely believable. Even after making allowances for the younger poet's extreme sensitiveness, his action is difficult to pardon. It cost him dear in the shape of enemies, for his next few plays were adversely criticized.

This unfortunate episode, and a sharp quarrel with his old friends, the Port Royalists, who regarded the theatre as wickedness and accused their old pupil of becoming a "poisoner of the public mind," embittered Racine.

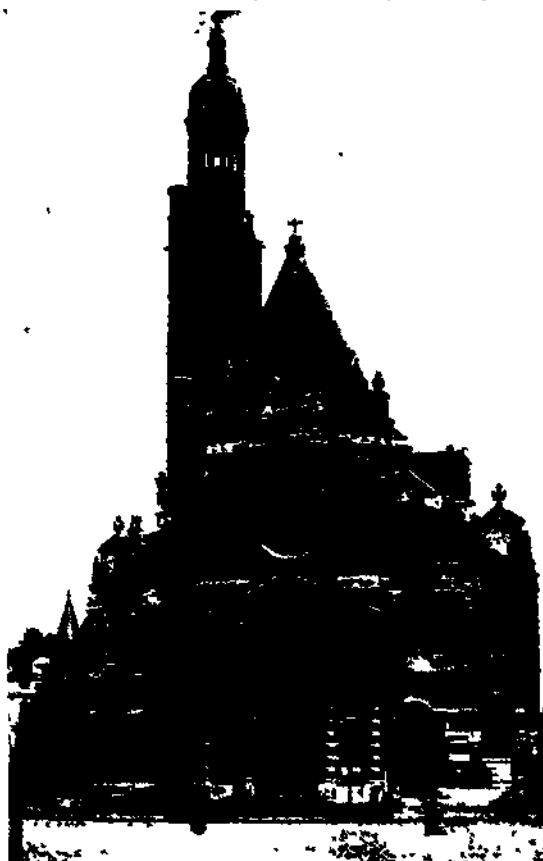
But he wrote with growing power. Another ode, written to celebrate the recovery of the king from a serious illness, won him an annual pension of 600 francs. His next play, *Andromaque* (1667), performed at the Hôtel de Bourgogne theatre, was of such an intense

character that one of the actors died through over exertion in the attempt to do justice to the powerful emotions expressed by Racine.

Such violent outbursts of passion as the following are frequent in the plays of Racine :

Orestes : What ! Pyrrhus ! I meet thee once again ! Pierced by so many blows, how hast thou escaped ? Hold ! here is my blow, which I have saved for thee.

RACINE'S LAST RESTING-PLACE



Racine was first buried at Port Royal, but, after the destruction of the abbey in 1711, his body was reinterred in the church of St. Etienne du Mont, Paris.

But what do I see ? Hermione before my eyes clasps him in her arms. She snatches him from the threatened blow. Ye gods, what looks she casts upon me ! What demons, what serpents she brings after her !

King Louis XIV was highly amused by Racine's next play, *Les Plaideurs* (1668), which was a comedy based upon *The Wasps* of Aristophanes and tilting at the legal mind. This royal patronage assured the play's success, but Racine returned to drama. *Britannicus* (1669), *Bérénice* (1672), *Mithridate* (1673), all dealing with classical or mythological characters of ancient times, were less enthusiastically received, and it began to be whispered that Racine, like Corneille, was beginning to nod.

The older of the two famous dramatists once took occasion to make a sly hit at his brilliant and more successful rival. *Bajazet* (1672), a play dealing with Turkish life, was being performed. The aged Corneille turned to an intimate friend and said in a low tone: "I should not say what I thought to anyone but you, because it would be thought that I was jealous; but mark my word, there is not a single character in *Bajazet* with the sentiments of a man in Constantinople. They all wear Turkish dresses, but think as does a Frenchman in the centre of France."

Racine's defects as a dramatist certainly seemed more obvious in the plays written

ONCE DESTINED FOR THE CHURCH



The Port Royalists were strongly against Racine becoming a man of letters. At one time their influence was so great that they almost persuaded him to take holy orders.

during this period, but his genius burst forth again in *Phèdre* (1677), in the name part of which France's famous actresses have since achieved their highest triumphs. *Phèdre* was also remarkable for the conspiracy against its author which it provoked.

As soon as it became known that Racine was writing his tragedy, the schemers resolved to ensure its failure. They engaged a third-rate poet to write a tragedy in time to be brought out at the same time as Racine's. The object was to withdraw attention from the Hôtel de Bourgogne theatre, where *Phèdre* was to appear, to the Théâtre Guénégaud, where it was arranged for the rival tragedy to be played.

The plot partly failed, for Pradon, the third-rate poet, was late in finishing his play. *Phèdre* was played for the first time on New Year's Day, 1677, and with success. The other play did not appear until three days later, but meanwhile the conspirators hired all the boxes on the first tier of both the theatres for a period of six nights.

Result of the Trick

This trick cost £3,000, and its effect, of course, was to fill the Théâtre Guénégaud and empty that of the Hôtel de Bourgogne. But the plot could only continue while there was money to pay for it, and Racine, who was at first in despair, triumphed in the end.

He was, however, so disgusted with the injustice done to him, and so disillusioned with the life that the stage imposed upon him, that, like Corneille, he decided to write no more plays. The influence of the Port Royalists reasserted itself, and he suffered great remorse for even the slight extent to which he had shared in the dissipations and frivolities of theatrical life.

In 1677 he married and settled down to a quiet domestic life, which lasted for twenty years, and during which he wrote only two more plays, *Esther* (1685) and *Athalie* (1691), both religious in character and intended for performance at a college for young girls. He also held the office of historiographer to the king. He died on the 21st April, 1699.

Little Concerned with Reality

It has been said that Corneille painted men as they ought to be, and Racine men as they are. Neither, however, was much concerned with reality on the stage. They drew their characters as either preternaturally good or unnaturally bad, and within the stereotyped mould in which their dramas were cast the virtues and vices were fixed and stable. There were no subtle transitions from good to evil, such as are found in Shakespeare or Goethe, no stage-by-play of the kind invented by Molière, and no complex problems in psychology such as form the subject of modern drama.

Within these limitations, imposed upon them by the nature of their minds and the cramped style of French drama prevalent in their time, both Corneille and Racine rose to great heights of poetic and dramatic expression. Their names will always be linked together as masters of a type of drama now obsolete, but the skeleton of which still exists under the name of "melodrama."

[See "Corneille and Racine," by H. M. Trollope (1898); "Corneille and His Time," by F. Guizot (1852); "Racine and French Classical Drama," by Baron Blaise de Bury (1845); and the various editions of the dramatists' works.

TRANSLATORS of the HOLY BOOK

The Noble Men of Faith Who Willingly Risked Their Fortunes and Lives to Bring the Bible Within the Understanding of the Common People

SO familiar a book is our Bible that we are apt to lose sight of the fact that it was not until the year 1382 that the whole of it had been translated into English. Before that date great and good men, such as the Venerable Bede, had produced English versions of parts of the Bible, and the Anglo-Saxon herdsman poet, Caedmon, inspired by a vision, had sung of the Bible stories. But we have to wait many years until the coming of the first complete Bible.

Of the last days of Bede a touching story is told. He was dictating his translation of St. John's Gospel, and, though seriously ill, he would not rest. All day he worked, and, as the last rays of the setting sun lightened the gloom of his narrow cell, his task was nearly finished. He had reached the last chapter, and his scribe in anxious tones asked his beloved master whether he would not rest. "Nay, we must go on," replied the resolute old man. As the scribe set down the last sentence, Bede echoed his words, "Ay, it is finished," and, turning his face to the light, breathed his last.

Bede was born about the year 672, and from the age of seven passed his life in Durham, dividing his time between the monasteries of Jarrow and Wearmouth, which, though some miles apart, were ruled by a single abbot. From that tender age he describes himself as having "spent the whole of my life within that monastery, devoting all my pains to the study of the Scriptures." Unhappily, his translation of the Gospel of St. John has not survived.

The first English Bible, known as the Early Version, was followed in 1388 by the so-called Later Version, which is a revision of the former. These, known as the Wycliffite versions, were prepared by a group of early reformers, headed

by John Wycliffe, but it is not known whether Wycliffe himself took any hand in them. They were translated from the Latin Vulgate, which was the work of St. Jerome, and were multiplied by the primitive and laborious method of copying out by hand. The Wycliffite Bible aroused great opposition, because many passages in it gave offence to the Church, but, in the face of difficulties, it was distributed far and wide.

MILES COVERDALE



In 1535 Miles Coverdale, a secular priest, finished his translation of the Bible. This was the first complete Bible to be printed in English.

Then, in the fifteenth century, came the invention of printing, and, as proof of the great interest that the Bible aroused, the first complete book that was multiplied by the newly discovered process was the Latin Bible. With the invention of printing sprang up a crop of scholars, who turned their attention to what each, according to his lights, considered to be the best means of producing a translated Bible. Of these perhaps the best known are William Tyndale, Miles Coverdale, and Gregory Martin. These three men, besides many others, have left their mark on the Authorized Version, and the last of these, Gregory Martin, was responsible for the Douai Bible.

When James I became king the Church services were conducted wholly in English, and, in order to produce as perfect an English Bible as possible, that monarch secured the services of a band of scholars to prepare a new translation. After years of labour and study these learned men brought out, in 1611, the Bible which is now so well known, namely, the Authorized Version.

The first of the early translators of the Bible that we have mentioned, William Tyndale, was born on the Welsh border, probably in Gloucestershire, about the year 1492. He was educated at Oxford and Cambridge, and at each of the universities he drank deep of the new learning.

For biographies not included in the Groups see detailed Index

After being ordained priest in 1521, he became chaplain and tutor in the family of Sir John Walsh, at Old Sodbury, Gloucestershire. His work in this position did not occupy his whole time, and he had many an opportunity of preaching in the neighbouring villages.

His sermons involved him in constant controversy, and after two years he left Gloucestershire for London with one resolve planted in his mind. He would himself translate the New Testament as it ought to be translated, and thus expose what he regarded as the corruptions in the Church to which his eyes had been opened. To Bishop Tunstall, that famous patron of scholars, he went, but the bishop was not at all sympathetic, so Tyndale found employment in preaching for some time at St. Dunstan's-in-the-West. After performing the duties of chaplain in the establishment of a rich draper, he at length came to the conclusion that for translating the New Testament "there was no place to do it in all englonde."

Departs for the Continent

In May, 1524, accordingly, he sailed for Hamburg with an assistant called William Roye, and subsequently travelled from place to place in Germany and Holland. Among the towns that he visited was Wittenberg, where he doubtless received encouragement from Luther, and it may have been in Wittenberg that he actually made his translation. While he was in the act of printing an edition in Cologne he was discovered by John Cochläus, a determined opponent of the Reformation. Cochläus at once began to do all he could to prevent the continuation of the printing, and, in addition, sent a letter to Henry VIII, warning him to keep his eye on the English ports, in case the offending volumes should be admitted.

The resolute translator and his amanuensis contrived to escape up the Rhine to Worms, carrying in their baggage the sheets that they had already printed. At Worms an edition was printed, and, in spite of Cochläus's warning, copies were smuggled into England, where they were eagerly bought. Once these dangerous volumes had reached England, very strong measures were taken to suppress them.

Falls into the Emperor's Hands

When Henry VIII changed in his attitude towards Rome, it was suggested that Tyndale might return to England, but the translator considered this too dangerous a proceeding and remained on the Continent, busy with revising his translations. In May, 1535, he was betrayed into the hands of the Emperor and imprisoned in the castle of Vilvorde, in Brabant, not far from Brussels, where he was tried and found guilty of heresy. On the 6th August of the following year he was put to death.

Besides the New Testament, Tyndale's translations included the Pentateuch, in which he had help from Coverdale, and also the book of Jonah. But for an untimely accident Deuteronomy, too, would have been placed to his credit. In 1529 he was making his way to Hamburg, when a storm arose off the Dutch coast, and his boat went down, carrying with it the translation of this book which he had just completed. Tyndale translated from the Greek and Hebrew originals, but also used the Vulgate. His translation, which keeps very close to the original and is written in simple language, was used as a basis by the translators of the Authorized Version.

Miles Coverdale of Cover Dale

Our next translator, Miles Coverdale, who was born about 1488, was a Yorkshireman. He is believed to have taken his name from Cover Dale, a district in what is called Richmondshire, in the North Riding. From early childhood he showed a desire for learning. After studying theology and philosophy at Cambridge he was ordained priest in 1514, and entered the convent of Austin Friars at Cambridge, where he made an exhaustive study of the Scriptures. About twelve years afterwards he became a secular priest, and in 1528 we find him preaching against confession and the worship of images. From this year until 1535 he seems to have been chiefly on the Continent.

The year 1535 was that of his triumph, for it was then that he completed his translation of the Bible. This was the first complete Bible to be printed in English. Many of the phrases in Coverdale's translation are preserved intact in the Authorized Version. The "Great Bible," ordered by Henry VIII in 1539 to be placed in all the churches, was partly based on Coverdale's Bible.

Relies on "Five Interpreters"

In his translation of the Bible Coverdale did not claim to be an independent translator. He states quite frankly in his dedication that he has translated "out of five sundry interpreters." These "interpreters" would probably be Luther, the Zürich Bible, the Vulgate, the Latin version of Pagninus, and Tyndale's English translation. But in handling his several authorities he displayed amazing deftness and tact. With less profundity and originality of mind than Tyndale, Coverdale shows in his literary style the ease of a born translator, and to his singularly happy renderings we owe many of the most familiar and beautiful passages of our Bible.

In 1540, owing to the reaction in religious feeling in England, Coverdale again visited the Continent, and two years later his Bible was prohibited by proclamation. About this

time he married, his wife being Elizabeth Macheson, sister-in-law of Dr. John MacAlpine, who helped to translate the first Danish Bible. After staying eight years abroad he returned in 1548 to England, where he was well received at Court, through the good offices of Cranmer. He was appointed almoner to Queen Catherine and chaplain to the young king, in whose reforming measures he took an active part.

Coverdale made a great reputation as a preacher, and particularly as a funeral orator, Queen Catherine's funeral sermon being preached by him. His eloquence and powers of persuasion were doubtless responsible for his appointment, in 1551, to the see of Exeter, from which Veysey, a very old man, had been compulsorily retired. Coverdale was well fitted to have control over the turbulent West Country people, and through his forceful preaching Devon became, under Elizabeth, a stronghold of Protestantism.

Loses His See

When Queen Mary came to the throne he was deprived of his bishopric on the score of his marriage, and the aged Veysey again became Bishop of Exeter. But, although Coverdale's marriage had cost him his see, it provided him with powerful and opportune friends, for, through Dr. MacAlpine's intervention, the King of Denmark prevailed upon the English authorities to allow Coverdale to proceed unmolested to Denmark.

In February, 1555, Coverdale started on his journey, travelling with two servants.

The story is that one of these so-called servants was no servant at all, but Mistress Coverdale herself. In his new home he occupied his time mainly in preaching and teaching, and he may have helped in preparing the Geneva Version of the Bible. After four years' sojourn in Denmark he returned to England and took up his preaching again. He did not resume his bishopric, but for some time held the living of

St. Magnus, near London Bridge. He died in February, 1568, and was buried in St. Bartholomew's church.

Our third translator, Gregory Martin, was a Sussex man, having been born at Maxfield, in the parish of Guestling. The year of his birth is not known, but it must have been about 1540, because he took his degree at St. John's

BEDE PREACHING IN AN EMPTY CHURCH



According to legend, when Bede's eyesight was failing, he was sent by mockers to preach in an empty church. After his closing words, instead of the usual response, a host of angels answered, "Amen, very Venerable Bede."

college, Oxford, in 1564 at the same time as Edmund Campion, the English Jesuit who was executed at Tyburn in 1581 for his allegiance to the ancient religion. Martin and Campion were firm friends, sharing their ideas, their books, and their meals at Oxford, where Martin "kept up with Campion in all the stations of academical learning."

For biographies not included in the Groups see detailed Index

After leaving Oxford Martin was received into the household of Thomas Howard, fourth Duke of Norfolk, in the capacity of tutor to the duke's son, Philip, who afterwards became Earl of Arundel. Himself a devout Catholic, Martin received every encouragement from his employer to use his religious influence in the ducal household. Soon after the duke was imprisoned in the Tower, Martin's position became very difficult, and he, like so many other English Catholics, fled to the Continent.

His place of refuge was the French town,

TYNDALE TRANSLATING THE BIBLE



William Tyndale persevered with his translation of the Bible, despite innumerable dangers and difficulties. When compelled to leave England, he continued his work abroad.

Douai, which was then the centre of propaganda of exiled English Catholics. Here, in 1568, William Allen, who became cardinal twenty years later, had founded an English College, the first of the seminaries ordered by the Council of Trent. In this seat of learning Martin found many of his old Oxford friends. For some time he busied himself in lecturing on the Scriptures and in teaching Hebrew. In 1577 he was employed by Allen to escort some students to the newly founded English College at Rome.

In 1578 he moved with the college to Rheims, where he spent the rest of his life. At Rheims he devoted himself with untiring zeal to the work by which his name will always be remembered—the translation of the Bible from the Latin Vulgate. All day long this devoted

scholar laboured among his books, but at last his health broke down. In April, 1582, Allen insisted on his going to Paris to see whether the physicians of that city could cure him. But he was past their aid—he was in the last stages of consumption. He returned to Rheims, where he died on the 28th October, 1582.

The Famous Douai Bible

Martin's translation of the Bible is known as the Rheims and Douai Version, or simply as the Douai Version. The New Testament was published at Rheims in the year of Martin's death, but the Old Testament, "for lack of good means," not until 1610, at Douai. The whole book, as revised by Richard Challoner in 1749-50, is the Bible used to this day by English-speaking Catholics all over the world. In this Bible the Latin text was very closely followed. The translation is a masterly piece of work, and practically every page of the Authorized Version shows the hand of Martin.

And so, when we read our noble Bible and marvel, not only at its completeness, but also at the sustained dignity of the Bible language, it is fitting that we should remember the dangers and the difficulties that have been met and overcome by the brave and learned men who were responsible for translating it. In these days a translation can be made in the quiet of a study or a great library, with all the apparatus of learning close at hand. But the Bible translators lived in times when knowledge was less accessible, when religious feeling ran high and men staked life and fortune on their opinions.

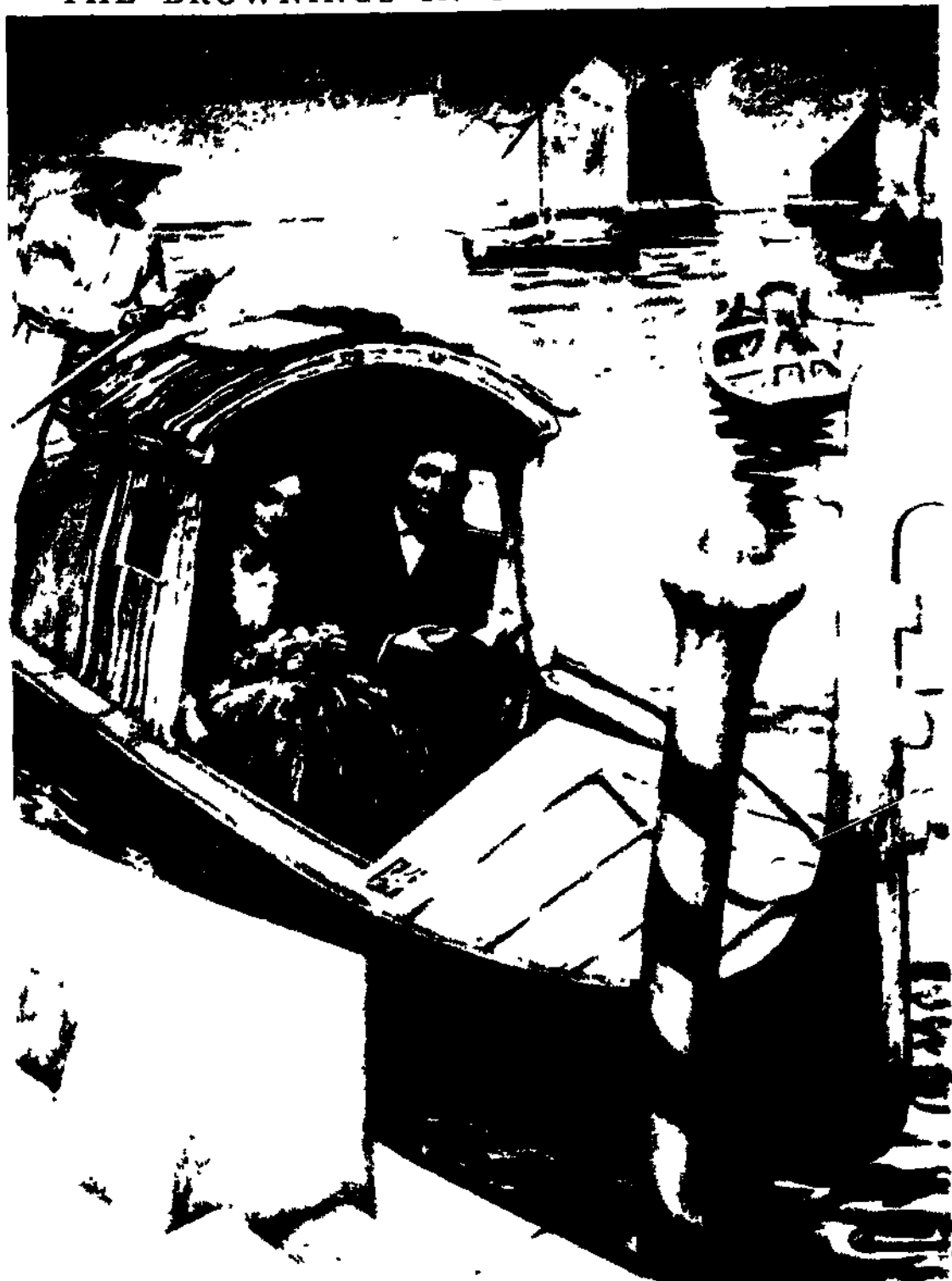
When next we turn the pages of the Bible, let us give a thought to these early translators—to Tyndale, repulsed by Bishop Tunstall, hunted from town to town, and finally executed for heresy; to Miles Coverdale, in hiding on the Continent; and to Gregory Martin, so strong in spirit and so frail in body, in the grip of a grievous malady, but toiling to the end.

The Bible as Literature

Apart from its spiritual value, the Bible is also our noblest literary heritage. The language in which, after many vicissitudes, it has come down to us, is filled with haunting beauty. Considered as literature, the Bible has made a profound impression upon the minds of men. Some of our greatest writers have owed much of the beauty and dignity of their literary style to their intensive study of the Bible. In this connexion, the names of writers of such widely different types as Bunyan and Ruskin immediately leap to the mind as being those of men who have studied to good purpose the results of the labours of the Bible translators.

[See "Our English Bible, Its Translations and Translators," by J. Stoughton (1878); and "The Bible: Its Origin and Its Significance," by A. S. Peake (1913).]

THE BROWNINGS IN THE GONDOLA CITY



The love story of the Brownings began with their first meeting in May, 1845 and continued until June 1861, when Mrs. Browning died at Casa Guidi, Florence. Their life together was one of unclouded happiness, their honeymoon full of delight. Where streams had to be forded or long staircases mounted, the stalwart bridegroom carried his delicate bride. With few interruptions the Brownings lived in Florence the whole of their married life. In the summer of 1851 they spent a blissful month in Venice, and it was in the Palazzo Rezzonico, his son's house in Florence, that Robert Browning died.

a fact

Painted specially for this by ALFRED A. DIXON

BIOGRAPHICAL DICTIONARY AND INDEX

The figures in black type indicate the page numbers of articles and references in the body of this work. A list of abbreviations appears at the end of the Biographical Dictionary and Index.

Abbas I (1557-1628) ruler of Persia after defeating the Uzbeks contrived with the help of Sir Anthony and Sir Robert Shirley to regain all his lost provinces

Abbey, Edwin Austin (1852-1911) Amer artist Royal Academician (1898) mural decorations in Boston Public Library and State Capitol Philadelphia

Abbot, Lyman (1835-1922) Amer Cong preacher and author succeeded Henry Ward Beecher at Plymouth Church Brooklyn (1888) editor of the *Outlook* N.Y. (1893)

Abdul Hamid I (1725-89) Sultan of Turkey concluded peace with Russia by the Treaty of Kainardji (1774) three years later war again broke out finally Russia took all the provinces north of the Danube

Abdul Hamid II (1842-1918) Sultan of Turkey rule infamous because of Armenian atrocities deposed (1909)

Abdul Medjid (1823-61) Sultan of Turkey issued the Tanzimat or Magna Charta of Turkey reorganized the army and the penal code formed a postal system and erected telegraphs troubles with Serbia Albania Syria Bosnia and Montenegro culminated in war with Russia in 1854

Abel, Gilbert Abbott (1811-56) Eng humorist and dramatist contributor to *Punch* his *Comic History of England* was published in 1857-58

Abel, Sir Frederick Augustus (1827-1902) Eng chemist part inventor of cordite (1880) director of Imperial Institute

Abelard or Abailard, Pierre (1079-1142) Fr philosopher and theologian conceived a violent passion for Heloise who took the veil Abelard became a monk in the Abbey of St Denis where his lectures attracted crowds his writings were denounced as heretical

Abeltonway, Charles Benjamin Bright McLaren, 1st Baron (born 1850) Eng politician and business man

Abelard, Lancelotti (born 1881) Eng poet author of *Interludes and Poems* (1908) etc

Abelard, Sir Ralph (1784-1801) Brit general served in Holland (1793 and 1799) West Indies (1795) Ireland (1797) Egypt (1801) mortally wounded in his victorious battle of Alexandria

Abelard, George Hamilton Gordon, 4th Earl of (1784-1860) Brit statesman occupied successively the office of Foreign Secretary and of Secretary to the Colonies Prime Minister (1852-55)

Abelard, John Campbell Gordon, 1st Marquess of (born 1847) Brit statesman Gov gen of Canada (1893-9) Lord Lieut of Ireland (1886-1905-16)

Abelard, John (1704-1881) Brit surgeon Professor of Anatomy and Surgery to the Royal College of Surgeons

Abney, Sir William de Wivelscombe (1843-1921) Brit chemist and physicist made important photographic and colour printing researches

Abraham, William (born 1842) Brit Labour leader M.P. Privy Counsellor (1911) known as Mabon or bard by reason of his fine singing

Abraham, Luigi, Duke of (born 1873) It royal prince scientist and explorer first to ascend Mt St Elias Alaska

(1897) led Arctic exp (1899-1900) commanded It fleet (1915-17)

Abraham, Edward Goodrich (born 1856) Amer chemist invented carborundum and silicon

Adair, Sir Henry Wentworth Dyke, Bart (1815-1900) Brit physician and scientist Regius Professor of Medicine at Oxford (1868-94)

Adair, John Emerich Edward Dalberg 1st Baron (1834-1902) Brit historian Regius Professor of Modern History at Cambridge planned The Cambridge Modern History

Adam, Robert (1728-92) Brit architect most famous of the four brothers Adam who erected the buildings known as Adelphi besides many others in London and elsewhere

Adams, John (1735-1826) 2nd President of the U.S.A. called to the bar (1761) a delegate at the Congress at Philadelphia (1774) he encouraged the movement for independence in which as chairman of the board of war he took an active part commissioner to the Court of France (1788) sent on an embassy to England (1779) elected Vice President of the Union (1789) succeeded Washington as President (1797)

Adams, Jane (born 1860) Amer reformer lecturer and writer on social topics

Adams, Christopher (born 1869) Brit politician and doctor of medicine Minister of Munitions (1916-17) Minister of Reconstruction (1917) President of Local Government Board (1919) first Minister of Health (1919-21)

Adams, Joseph (1672-1718) Brit poet and essayist in 1704 The campaign a poem celebrating the victory of Blenheim brought him into favour sent to Ireland as Secretary to the Lord Lieutenant (1708) contributed largely to the *Tatler* and *Spectator* from their commencement and wrote 274 numbers for the latter his tragedy of *Cato* was produced at Drury Lane in 1713 married the Countess Dowager of Warwick (1716) and in 1717 was appointed Secretary of State

Adair, Max (1841-1915) Amer author of *Out of the Hurly Burly* (1874) and other works his real name was Charles Heber Clark

Adair, Clement, a pioneer of flight 337

Adrian I (died 795) Pope raised to the papal chair in 772 the firm establishment of the temporal power of Rome may be attributed to him

Adrian IV (died 1159) Pope (1154) Nicholas Breakspere the only Englishman who has occupied the papal chair

Adrian (1109-66) Eng writer and saint adviser of Henry II his literary works include *Life and Miracles of St Edward King and Confessor*

Adrianus (89-314 A.D.) Athenian orator famous in an attack on Demosthenes was twice sent on an embassy to Philip of Macedonia and retired to Rhodes where he founded a school

Adrianus (525-566 A.D.) Athenian tragic poet distinguished also for his valour at the battles of Marathon Salamis and Plataea first gained the prize for tragedy in 484 B.C. retired for some years to Sicily but returning to Athens received the prize for tragedy for his famous trilogy *Orestes* eventually returned to Sicily where he died

Adrian (520-564 A.D.) Gk maker of fables 370

Agamemnon, King of Mycenae was entrusted with the command of the allied forces of Greece in the Trojan war

sacrificed his daughter Iphigenia at Aulis to appease the wrath of Diana on his return to Mycenae he was killed by his wife Clytemnestra

Agassiz, Alexander (1835-1910) son of Louis Agassiz and afterwards his father's assistant in the study of marine zoology. A fortunate enterprise in copper mining made him wealthy and he devoted him self to the promotion of his favourite study

Agassiz, Louis Jean Rodolphe (1807-78) Swiss Amer naturalist son of a Swiss Protestant clergyman appointed professor of zoology and geology at Harvard U.S.A. (1848) visited Brazil (1865) wrote numerous valuable works was a disbeliever in the Darwinian theory of evolution

Agrippa, Marcus Julius (37-93) Roman general became Governor of Britain (70) built the chain of forts from the Clyde to the Firth of Forth

Agrippa, Marcus (10 B.C.-A.D. 44) tetrarch of Achaia and afterwards under the Emperor Claudius king of Judaea and Samaria persecuted the Christians

Agrippa II, Herod (27-94) son and successor of Agrippa I took the part of the Romans against his countrymen on several occasions St Paul was brought before him in 59

Ahab (875-853 B.C.) seventh king of Israel his reign is marked by the attempted extermination of the followers of Jehovah the death of Naboth and his own death in battle with the Syrians

Ahar, eleventh King of Judah son of Jonathan became tributary to Tiglath-Pileser King of Assyria whom he had summoned to assist him in repelling the kings of Israel and Damascus

Adrian, Saint (died 661) monk of Iona missionary to Northumbria first bishop of Lindisfarne 635

Amager, Alfred (1837-1904) Brit divine and author master of the Temple (1894) biographer of Charles Lamb

Amory, William Harrison (1805-82) Eng novelist originally intended for the bar his first considerable work was *Sir John Chiverton* which was followed by many others including *The Tower of London* *Old St Pauls* and *Jack Sheppard*

Amory, Sir John, Bart (1833-1911) Brit contractor and politician built the Aswan and Assuit dams on the Nile (1898-1902) M.P. (1887-1906)

Aray, Sir George Biddell (1801-92) Brit astronomer Astronomer Royal (1830-81)

Alaric I (376-410) King of the Visigoths had served in the Rom army but on the death of Theodosius headed his countrymen in revolt against Rome after fruitless attempts on Greece and It he was successful in 402 in reaching Rome which he thrice besieged, finally taking and pillaging the city

Alban, Saint, Rom soldier martyred in Brit about 285 and in honour of whom a monastery was founded at Verulam (St Alban)

Alban, Emma (born 1852) Brit singer real name La Jeunesse a native of Canada married Ernest Gye (1878)

Albert (born 1836) Duke of York second son of King George V held rank of lieutenant in Navy and captain in Royal Air Force married Lady Elisabeth Bowes Lyon (1923)

Albert, Francis Charles Augustus Emmanuel (1819-61) Prince Consort second son of Ernest, Duke of Saxe-Coburg-Gotha 1128

ALBERT

Albert I (born 1875) King of the Belgians succeeded Leopold II (1909) fought valiantly in the World War (1914-18)

Albert I (1248-1308) Duke of Austria and Emperor of Germany elected emperor on deposition of Adolphus of Nassau and after slaying Adolphus at the battle of Gethim was crowned at Aix la Chapelle following a succession of wars he was killed by his nephew, John of Swabia

Albert II (1298-1358) Duke of Austria surnamed the Wise succeeded his father in the dukedom but declined the imperial crown established peace with the neighbouring powers but was defeated by the Gwabs at Morgarten

Albert III (1349-83) Duke of Austria on the death of Albert II his sons succeeded jointly to his dominions and on the division amongst the survivors in 1379 Austria fell to Albert

Albert IV (1379-1414) Duke of Austria allowed his cousin Wilhelm to share his dukedom and was named successor to the throne of Hungary and Bohemia but was poisoned in 1414 by the Margrave of Moravia

Albert V (1397-1439) Duke of Austria and II of Ger succeeded his father in the dukedom and obtained Moravia by marriage in 1439 was crowned King of Hungary and elected Emperor his reign was marred by a civil war with the Hussites

Albertus Magnus (1193-1280) Ger philosopher called the Universal Doctor his dealings in astrology and alchemy gained him notoriety

Alcibiades (450-404 B.C.) Athenian statesman acquired political power after the death of Cleon and took a large part in the Peloponnesian war in 415 was appointed one of the leaders of the Sicilian expedition but detained in Athens on charges of misdeeds fled to Sparta and aided that state against Athens subsequently took refuge with the Persian Hierophanes in 407 he returned to Athens but was again expelled to fly in the following year assassinated in Phrygia

Alcmæon, his part lived between 671 and 631 B.C. and was originally a slave only lyrical poet of note that spirit produced

Alcock, Sir John (1892-1919) Brit air man with flight A.W. known made first non-stop transatlantic aeroplane flight

Alcott, Louisa May (1832-89) Amer authoress began early to write but met with no marked success till the publication of *Little Women* (1867)

Alcubert, Jean le Rond d' (Paris 1717-83) Fr scientist and mathematician a clever treatise on the integral calculus procured his admission to the Academy of Sciences enunciated the great principle of the conservation of energy which underlies every problem of applied mathematics founder and joint editor with Lacroix of the *Tr. Mécanique*

Alexander, Sir George (1859-1918), Brit actor

Alexander of Cappadocia (3rd cent.) Bishop of Cappadocia suffered persecution under the Emperor Valerianus and being translated to the see of Jerusalem was again thrown into prison where he died

Alexander Severus (202-235) Emperor of Rom, defeated the Persians (232) but was murdered in Gaul by Maximin

Alexander I, Prince of Bulgaria (1877-93) son of Alexander of Rom, elected Hereditary Prince (1879) in 1885 he was invited to add Eastern Rumelia to his original territories and at the same time Serbia declared war, the Serbian troops were repulsed, and an armistice concluded Alexander abdicated in 1886

Alexander (1803-1920), King of Greece succeeded (1917)

Alexander III (born 1888) King of Yugoslavia succeeded (1921)

Alexander I (498-404 B.C.) King of Macedonia, the Persians invaded his kingdom and compelled him to join them in the invasion of Greece

Alexander II (369-37 B.C.) King of Macedonia, waged a successful war with

Thessaly but was murdered by his brother Ptolemy

Alexander III (356-323 B.C.) King of Macedonia surnamed The Great son of Philip II, educated partly by Aristotle and early gave proofs of skill and courage A revolt of Thebes at the commencement of his reign was promptly quelled then crossing the Hellespont he marched against the Persians conquering Phoenicia and Egypt After the final defeat of Darius at Gaugamela, and the capture of Babylon, Susa and Persepolis Alexander commenced the conquest of India but after crossing the Indus and penetrating as far as the Ganges he was compelled to return to Babylon but paused at Susa to celebrate his marriage with the daughter of Darius. He died at Babylon after a reign of about 18 years

Alexander I (1777-1825) Tsar of Rus succeeded to the throne (1801) entered into a treaty with Eng Austria and Sweden to resist the encroachments of Prussia but was defeated at the battles of Austerlitz Eylau and Friedland and compelled to make peace with Napoleon at Tilsit war again broke out in 1812 and on the conclusion of peace in 1814 Alexander visited Eng and Poland **Alexander II** (1818-81) Tsar of Rus succeeded his father in 1855 terminated the Crimean war soon after his accession by the Treaty of Paris improved education and emancipated the Russian serfs waged war successfully on Turkey in 1877-78

Alexander III (1846-94) Tsar of Rus second son of the preceding whom he succeeded to the imperial throne chiefly notable for the advances made by Rus in Central Asia

Alexander I (1078-1124) King of Scotland the throne (1107) married the daughter of Henry I of Eng

Alexander II (1198-1249) King of Scotland succeeded his father William the Lion (1214) supported the Eng barons in their revolt against King John though afterwards consenting to do homage to Henry III

Alexander III (1241-86) King of Scotland son of the preceding married Margaret daughter of Henry III of Eng and afterwards did homage to Edward I, during his reign the great battle of Largs (1263) was fought between the Scot and Norwegian troops and resulted in the withdrawal of the invaders

Alexander I, Pope Bishop of Rome (107-16)

Alexander II (died 1073) Pope Anselmo Ridgway was born at Milan took part in the controversies at Milan and on the death of Nicholas II (1061) was elected Pope

Alexander III (died 1181) Pope Roland Banericio a member of the Bandinelli family in Siena held the chair of theology at Bologna and being elected by a majority in 1159 was acknowledged as Pope by both Eng and Fr the Emperor Frederick I supported his rival and a lengthy war ensued but after besieging Alexandria and being defeated at Legnano in 1176 the emperor agreed to recognize Alexander

Alexander IV (died 1261) Pope Rainoldo of Anagni Cardinal Bishop of Ostia was elected Pope in 1254 continued the war with the Two Sicilies which his predecessor Innocent IV had initiated, and endeavoured to unite the Grk and Latin churches

Alexander V (died 1410) Pope Peter Filargo a Franciscan monk and learned divine who ascended the Papal throne at the age of 70, and died ten months later

Alexander VI (1431-1503) Pope Rodrigo Lenxolo (Borgia) elected on the death of Innocent VIII his means of raising money aroused the opposition of Savonarola who was excommunicated and put to death

Alexander VII (1599-1667) Pope Fabio Chigi succeeded in 1653 exerted himself nobly during the ravages of the plague in Rome, and did much to improve that city

Alexander VIII (1610-91), Pope, Pietro

ALICE

Ottoboni, became Pope (1686), and succeeded in reforming many abuses and re-establishing friendly relations with Fr

Alexandra (born 1844), Queen of Edward VII 643

Alexandri, Mikhail Vassilievitch (1855-1918), Rus soldier fought in Russo Turkish war (1877-78), Russo Japanese war (1904-5), and World War (1914-18)

Alexandri, Eugene Ivanovitch (born 1843), Rus admiral, fought in the Russo Japanese war (1894-5) and the Russo Japanese war (1904-5)

Alexandri, Mikhailovich (1829-76), Tsar of Rus succeeded to the throne in 1845 after a revolt in 1848 he devoted himself to the interests of his country, waged war with Poland (1844-47), and by the peace of Adrianov added to his dominions the Polish territories on the left bank of the Dniester

Alexandri I (1048-1118) Emperor of Constantinople served successively under Ducas and Nicephorus III, but his popularity roused the jealousy of the latter and Alexius was compelled to fly the troops proclaimed him emperor and Constantinople was taken and Nicephorus deposed in 1081

Alfieri, Count Vittorio (1749-1803), Italian poet and dramatist, produced his first tragedy *Cleopatra* in 1776 which was followed by numerous others due much to reform and sleek the Italian drama

Alfonso I (died 1134) King of Aragon and Navarre ascended the throne (1104) successfully waged war with the Moors of Saragossa slaying their king and capturing Saragossa failed in an attack upon Valencia and Granada, being defeated by the Almoravides

Alfonso VI (1080-1109) King of Leon and Castile ascended the throne of Leon and Asturias on his father's death while Castile and Galicia fell to his brothers Sancho and Garcia a war with Sancho resulted in Alfonso's abdication but on the death of Sancho he succeeded to both kingdoms afterwards carried on a vigorous war with the Moors, and added largely to his dominions

Alfonso X (1226-84) King of Leon and Castile succeeded (1252) aspired to be emperor of Ger and in 1257 divided the election with Richard of Cornwall again unsuccessfully attempted to gain the imperial crown in 1272 and was driven from the throne by his son Sancho

Alfonso XII (1857-85) King of Sp proclaimed king (1875) his reign was troubled by the continuance of the Carlist war as well as frequent disturbances **Alfonso XIII** (born 1886), King of Sp son of Alfonso XII married Princess Victoria Eugenia daughter of Princess Henry of Battenberg

Alfonso I (1110-85), King of Port, succeeded his father as Count of Port, and defeating the Moors at Castro Verde and Camp d'Ourique was proclaimed king (1143) established his seat of gov't at Lisbon from which he had driven the Moors but was afterwards defeated and taken prisoner by Ferdinand II of Leon

Alfonso III (1210-79) King of Port, deposed his elder brother, Sancho, and seized the throne (1248), was victorious over the Moors and improved the condition of his people

Alfred, Henry (1810-71), Brit divine, minister of Quebec chapel (1858) Dean of Canterbury (1857) his chief work as an edition of the Grk Testament, he also promoted and assisted in the revision of the Authorized Version

Alfred the Great (849-901), Eng king, born Wantage, Berks, youngest son of Ethelwulf, king of the West Saxons, succeeded on the death of his brother Ethelred to a throne threatened by invasion from without and dissension within the great victory of Edington (878) over the Danes led to the peace of Wedmore, and Alfred was thus for a time free to devote himself to peaceful reforms. Prominent amongst reforms are the establishment of social order, the encouragement of learning, and the founding of a national fleet

Alfred, Grand Duke (1848-75), Grand Duke of

of Hesse Darmstadt was the third child of Queen Victoria and the Prince Consort; married the Grand Duke of Hesse (1862)

Alison, Sir Archibald, Bart. (1792-1867), Brit historian, called to the Scottish bar, becoming deputy advocate in 1822. His most famous work is "The History of Europe from the Fr Revolution to the Restoration of the Bourbons"

Alison, Sir Archibald, Bart. (1826-1907), Brit soldier, son of the above, fought in the Crimea, Indian Mutiny and Ashanti War and at Alexandria and Tel el-Kebir
Alban, Sir Hugh (1810-82), Canadian shipowner, founder of the Allan line of steamships and a promoter of the Canadian Pacific Rly

Albutt, Sir Thomas Clifford (1836-1925), Brit physician, inventor of the short clinical thermometer, regius professor of physics at Cambridge Univ 1892, vice-president of the Royal Society (1914-18)

Alligri, Gregorio (1680-1682), It musician, composer of the celebrated *Masere*

Allen, Charles Grant Blairhindle (1849-99), Brit author and popular writer on scientific subjects

Alley, Edmund, 1st Viscount (born 1861), Brit. field-marshal, commander of Palestine expedition in World War, 1917

Alley, Edward (1866-1926), Eng actor, a founder of Dulwich College

Allday, William (1824-89), Brit poet author of many songs, and ballads, including "Day and Night Songs" and "Lawrence Bloomfield"

Almagro, Diego d' (1475-1538), Span soldier, companion of Francisco Pizarro in the conquest of Peru, quarrel between himself and the Pizarro brothers was frequent, and in 1539 they had recourse to arms, and Almagro was defeated and captured, and afterwards put to death

Alma-Tadema, Sir Lawrence (1836-1912), Eng painter, born in Friesland, elected A R A in 1876 and R A in 1879. Among his numerous works are "Phidias and the Elgin Marbles" (1868), "A Roman Emperor" (1871), "The Sculpture Gallery" (1875), "Sappho" (1881) and "The House of Melchior" (1888)

Almeida, Francisco d' (1450? - 1610), Port sailor, first Port viceroy of India. He captured several towns on the east coast of Africa and after a victory at Calicut fixed his seat of govt at Cochim, before resigning the command to Albuquerque, he defeated and dispersed the fleets of Calicut and L^a

Almeyda, St. (1568-91) patron saint of schoolboys

Alva, Ferdinand Alvarez de Toledo, Duke of (1566-88), Span soldier, governor of the Netherlands under Philip II of Sp., under his merciless rule more than 18,000 persons were sent to the scaffold, and a revolt headed by the Prince of Orange broke out, which, after nearly forty yrs of war, resulted in the independence of the provinces. Alva was recalled (1578), and afterwards conquered Port

Alvarado, Pedro d' (1495?-1541), Span soldier, one of the Span conquerors of Mexico, took part in the expedition and victories of Cortez, and was entrusted with the command of the city of Mexico, and afterwards made governor of Guatemala and Honduras, explored California, killed in an expedition against Xalisco

Alverston, Richard Everard Webster, first Viscount (1842-1915), Lord Chief Justice of Eng (1906-15).

Ambrosius, Aurelianus (died 497), Brit prince, deposed Vortigern and was proclaimed king in 485, afterwards fought with the Saxons under Hengist, whom he finally overcame and put to death in 489

Ambrosius or Ambrose, Saint (339?-97), Bishop of Milan, son of a Praetorian prefect and himself Governor of Liguria, he was called in 374 to the bishopric of Milan, and distinguished himself by his opposition to Arianism and Paganism, as well as to the crimes of the Emperor, last great reformer of Church music

Amerigo Vesputi (1451-1512), It navigator, claimed priority over Cabot and Columbus in reaching the mainland of Amer, but the best authorities consider this claim to be unfounded, visited Brazil in 1498

Amery, Leopold Charles Maurice Stanetti (born 1873), Brit statesman, Colonial Secretary (1924)

Amherst, Jeffrey Amherst, Baron (1717-97), Brit field-marshal served on the Continent and in Amer, where he succeeded Abercrombie as commander-in-chief, after many victories, Montreal surrendered and Newfoundland was recovered from the Fr

Amherst, William Pitt Amherst, Earl (1773-1867), Brit diplomatist, Gov-Gen of India (1823-3)

Amiel, Henri Frederic (1821-81), Swiss author, famous by reason of his "Journal"

Ammonius, Marcellinus (266?-301?), Gk historian, served in Gaul, Pannia, Mesopotamia, and in the Persian wars under Julian, his history is a continuation of that of Tacitus to the time of Ammianus

Ammenius, Gk philosopher who taught at Alexandria in the sixth cent., a Neo-Platonist, wrote several commentaries on Aristotle

Ampere, Andre Marie (1775-1836), Fr scientist, considered the father of electro-magnetics, first attracted attention by a treatise on the Theory of Probability, published in 1802 and ultimately became professor at the polytechnic school in Paris. In 1820 Oersted's discovery of the effect of voltaic currents upon magnetic needles was brought to his notice, and Ampere verified and completed this and showed also the mutual effect of currents upon each other from which he deduced a new theory of magnetism

Ampuhl, Otto Wilhelm Leopold Russell, 1st Baron (1822-84), Brit diplomatist appointed ambassador to Berlin (1857) and with Lord Beaconsfield and Salisbury represented Eng at the Congress of Berlin, 1878

Amundsen, Roald (born 1872), Norwegian navigator and explorer, discoverer of the South Pole, 1901, 12

Anserson (born 500? n.c.) Gk lyric poet lived at Samos under the patronage of the tyrant Polycrates, and afterwards at Athens

Anastasiu I (430?-518) Rom Emperor in the E of humble origin he entered the life-guards of the Emperor Zeno on whose death in 491 he was raised to the throne, a war with Persia and an invasion of the Huns were among the troubles of his reign, while in 514 Vitellianus besieged Constantinople and defeated him

Anastasiu II (died 719), Rom Emperor in the E., elected to the throne on deposition of the Emperor Philippicus, a rival claimant arose in Theodosius, who besieged and took Constantinople, and Anastasiu abdicated in 716, betrayed while attempting to regain the throne and beheaded

Anaxagoras (500?-428 n.c.), Gk philosopher, numbered amongst his pupils Euripides and Pericles, and probably Thucydides and Socrates, banished on a charge of atheism, he retired to Lampsacus, explained his views in a treatise on "Nature"

Anaximander (610-547 n.c.), Gk philosopher, friend and disciple of Thales of Miletus, and a distinguished astronomer

Anderson, Hans Christian (1806-1875), Danish author and poet, 1867

Anderson, Elizabeth Garrett (1836-1917), Brit doctor, studied medicine at the Middlesex, St Andrew's (Edinburgh), and London hospitals, and in 1865 received the diploma of L.S.A., and was appointed medical attendant to St Mary's dispensary, made visiting physician to the E London hospital for children, 1870, and obtained the degree of M.D. at the university of Paris, in addition to being Brit's first woman doctor, was first woman mayor (of Aldersburgh), (1898)

Anderson, Mary Antoinette (born 1869), Amer actress, at sixteen years of age made her debut at Louisville, U.S.A. as Juliet retired from the stage (1886)

Andrássy, Julius Count (1823-90), Hungarian statesman in politics Liberal, he supported the policy of Kossuth. Upon the collapse of the Hungarian insurrection he was sentenced to death, but escaping to Fr. passed seven years (1849-56) in that country and in Eng. Appointed premier of the first separate Hungarian cabinet, he transformed Hungary from a turbulent province to the most trustworthy portion of the empire. Through his influence Austria and Hungary refused to take part with Fr. in the Franco-German war, from which two important results followed, Rumania and Herzegovina were annexed to the empire, and Ger found herself compelled to effect an Austrian alliance. Andrássy took a leading part in the Berlin Conference (1878), but in the following year resigned office.

André Joha (1751-80), Brit soldier served in the war with Amer, and rose to the rank of major, conducted the negotiations with Benedict Arnold for the betrayal of West Point, but being discovered in disguise, was arrested and put to death as a spy

André del Sarto (1486-1531), It painter, pupil of Peter da Cosimo worked at Florence and in Fr, where Francis I. loaded him with honours, pictures by him are in the Uffizi, Pitti, and National galleries

Andréa, Solomon August (1854-97?) Swiss scientist and aeronaut, attempted to reach N. Pole by balloon (1897)

Andrew, Saint (died 70?) one of the twelve apostles, is said to have preached the Gospel in various countries, and to have been at last crucified at Patra in Achaia

Andrews, Lancelot (1755-1826), Bishop of Winchester assisted in the translation of the Bible, and besides sermons and lectures left popular "Manual of Private Devotions"

Andronicus I (Comnenus) (1110-85), Rom Emperor of the E., ascended the throne in 1183, putting to death Alexius II. was killed during an insurrection roused by his cruelty
Andronicus II (Palaeologus) (1260?-1332), Rom Emperor of the E. succeeded (1282), reigned jointly with Michael IX, his son (1295-1320) and on death of latter with Andronicus III, abdicated (1328)

Andronicus III (Palaeologus) (1295-1341), Rom Emperor of the E. called the "Younger" the grandson of the preceding whom he deposed, defeated in a war with Serbia and Turkey

Angelini, Fra (1387-1455), It painter, all his works are of a religious character, and famous for the delicate beauty of their subjects

Angell, Norman (born 1874), Brit author his most famous work is "The Great Illusion," published in 1910

Anglessy, Henry William Paget, 1st Marquess of (1768-1854), Brit soldier and statesman, commanded the Brit cavalry in Waterloo campaign (1815). Lord Lieutenant of Ireland (1828 and 1830-33)

Anne (1665-1714), Queen of Eng, 1702
Anne of Austria (1601-66), Queen of France, eldest daughter of Philip III of Spain and was married in 1615 to Louis XIII of France, on the death of Louis in 1643, Anne acted as regent, with Cardinal Mazarin as her chief minister, provoked the famous war of the "Fronde," in which she was ultimately victorious, reigned the govt to her son in 1661

Anne of Cleves (1516-57), 4th queen of Henry VIII of Eng, daughter of John III, Duke of Cleves, divorced from her husband, she lived contentedly in Eng, where she died

Anne of Warwick (1454-85), Queen of Richard III of Eng widow of Edward of Lancaster, son of Henry VI, on whose death at Tewkesbury (1471), she married Richard

Anne Boleyn (1507-36), Queen of Henry VIII of Eng mother of Queen Elizabeth, beheaded

Alamanno, Gabriele (born 1868) It man of letters and politician created Prince of Montecitorio (1924)

Albanus, Saint (1084-1108) Archbishop of Canterbury during the reign of William Rufus and Henry I a man of great piety and intellectual power he resisted the efforts of the king to despoil the Church

Alonso, George, Lord (1807-1782) Brit Admiral in 1780 was appointed to the command of a squadron dispatched to the Philippine Islands of three vessels which reached Juan Fernandez with his crew destroyed as unseaworthy With his one remaining ship *The Centurion* he eventually reached Manila and returned to Eng with £500,000 in prize money defeated the Fr off Cape Pinasterre (1747)

Alston, Sir William Reynell, Bart (1847-1914) Brit jurist Parl secretary to the Board of Education (1902-5)

Anthony of Padua (1195-1231) Franciscan saint and preacher most famous of followers of St Francis d'Assisi

Anthony of Thabes (?-1716) Saint founded the first Christian monastery near Memphis

Antigonos (died 301 BC) a distinguished general of Alex under the Great on whose death he became Governor of Phrygia, Lycia and Pamphylia and later assumed the title of king his ambitious schemes united his rivals and he was slain in battle at Ipsus

Antipater (310-310 BC) Gk soldier minister of Philip and Alexander the Great during the absence of the latter was appointed regent of Macedonia and Greece and defeated the Gks on the death of Alexander Antipater received the govt of Macedonia

Antisthenes (440-370 BC) Gk philosopher founder of the Cynic school opposed to speculative inquiries and taught that virtue was the one thing useful

Antonius Marcus (81-30 BC) Roman statesman after serving as a soldier in Syria joined Julius Caesar in Gaul and being elected consul with him in 44 ofered him the kingly title which he declined After the murder of Caesar Antony was opposed and defeated by Octavianus (Augustus) but the rivals came to terms and with Lepidus formed the second triumvirate Under their govt Brutus and Cassius were defeated and slain at Philippi and Antony was mainly responsible for the death of Cleopatra The civil war ended in his defeat at Actium and the triumph of Octavianus He died in Egypt by his own hand 32, prior 1908

Apelles, Gk painter flourished in the 4th century BC a friend of Alexander the Great who forbade any other to take his portrait by masterpiece was the Venus Anadyomene

Apuleius, Lucius Rom philosopher and Platonist of the 2nd cent whose most celebrated work is *Metamorphoses* or *The Golden Ass*

Aquinas, Saint Thomas (1227-74) theologian member of the order of Dominicans at the age of twenty four he lectured in Paris on philosophy and theology, endeavouring to show the accord of religion and reason his principal work is *Summa Theologiae*

Arab, Peash (1830-1911) Eg rebel defeated by Wodeley at Tel el Kebir (1882) exiled to Ceylon but allowed to return to Eg (1901)

Archeus, Median general of the 9th cent BC, the old belief that he was the founder of the Median kingdom is wrong

Arbuthnot, Sir Robert Keith, Bart (1864-1910), Brit admiral his ship was sunk at the Battle of Jutland and he and his crew were lost

Arch, Joseph (1826-1910) Brit labour leader established National Union of Agricultural Labourers M.P. for north west division of Norfolk (1885-1892-1895)

Archer, William (1866-1924) Brit theist critic and author his works include *Poets of the Younger Generation* (1902) and *India and the Future* (1917)

Archimedes (287-212 BC) Gk mathematician friend and perhaps the rival of Hieron II King of Syracuse He was amongst those slain in the general massacre which followed the taking of Syracuse Of his numerous works nine of the most important are extant including treatises on hydrostatics the measure of the circle and the quadrature of the parabola

Arditi, Luigi (1822-1908) It composer after visiting Amer he came to Eng land and was conductor of the orchestra of Her Majesty's Theatre (1867-78) his works include *I Brucchi* (1841)

Argand, Anne (1755-1808) Swiss chemist inventor of the Argand lamp which he brought out in Eng in 1782

Argyll, Archibald Campbell, 8th Earl of (1698-1661) Highland leader who took part in the Civil wars of the 17th cent first sided with the Covenanters, whose forces he commanded for a short time but on the execution of Charles I he broke with the Fug party and did all in his power to promote the Restoration committed to the Tower by Charles II on a charge of high treason and executed

Argyll, George Douglas Campbell, 8th Duke of (1823-1900) Brit statesman and author succeeded to title (1847) in following year was appointed Lord Privy Seal in the Cabinet of Lord Aberdeen in 1866 Postmaster General and again in 1859 Lord Privy Seal in the Administration of Lord Palmerston From 1868 to 1874 he was a member of Mr Gladstone's Govt as Secretary of State for India and for the third time accepted the office of Lord Privy Seal in 1880 but resigned His books include the *Reign of Law* (1866) and the *Unity of Nature* (1844)

Argyll, John Douglas Sutherland Campbell, 5th Duke of (1845-1914) Brit politician married Princess Louise daughter of Queen Victoria (1871) Gov Gen of Canada (1878-83) Member of Parl (1868-78 1895-1900) succeeded to title (1900)

Arrieta, Lodevico (1474-1538) It poet author of the great epic poem *Orlando Furioso* which celebrates the achievements of the Paladins of Charlemagne in the wars between the Christians and Moors

Aristides (510-467 BC) Athenian general and statesman surmamed the Just one of the ten Athenian generals at Marathon afterwards chief Archon Banished through the influence and jealousy of Themistocles he was recalled three years later upon the invasion of Greece by the Persians and was present at the battle of Salamis (480 BC) and Plataea (479 BC) the victory of his countrymen being largely due to him

Aristippus (435-356 BC) Gk philosopher pupil of Socrates from whom he differed materially and founded the school of the Cyrenaics teaching that pleasure is the only end of action

Aristophanes (born 448 BC) Gk comic poet and dramatist his works present a vivid picture of Athenian life and manners ridiculing the evils of the time and many of the leading men especially Socrates in *The Clouds* and Cleon the popular favourite in *The Knights*, of his fifty four plays only eleven remain

Aristotle (384-322 BC) Gk philosopher A pupil of Plato Aristotle became a leadingly proficient in physics metaphysics rhetoric politics ethics and natural history while of logic he justly claims to be the founder He was tutor to Alexander the Great afterwards returned to Athens and established a school in the Lyceum An accusation of impiety and perhaps political sympathy with Macedonia induced him to retire to Chalkis His philosophy has exercised immense influence and till the advent of the revival of learning its power in Europe was supreme

Arns (died 836), theologian a presbyter of Alexandria in the 4th cent whose teaching denied the divinity of Christ This doctrine was pronounced heretical,

and Arns and his followers excommunicated

Arkwright, Richard (1732-92) inventor of the spinning frame 1781

Arminius Jacobus (1580-1609) Dutch theologian founder of the sect of Arminians studied at Geneva under Beza but his adoption of the philosophic views of Peter Ramus brought him into disrepute and he retired to Biele and was ordained minister at Amsterdam (1588) chosen to defend Beza's doctrine of predestination the study of the subject resulted in his own conversion

Armour, Philip Danforth (1832-1901) Amer business man founded the firm of wholesale provision merchants which bears his name

Armstrong, William George, Baron (1810-1900) Brit engineer, 857

Arno, Thomas Augustinus (1710-1778), Brit composer his genius first showed itself in the music of *Comas* (1788) among his other popular productions is *Rule Britannia*

Arms, Hans Georg von (1581-1641) General and politician took part in the Thirty Years War serving successively under Gustavus Adolphus Wallenstein and the Elector of Saxony after gaining the decisive victory of Liegnitz (1634) he retired to his estates but was seized and imprisoned by the King of Sweden he escaped however but died soon after

Arms, Heinrich Karl Kurt Eduard, Count von (1824-81) Ger diplomatist ambassador at Rome (1864) ambassador to Fr (1872) but on his recall various charges were brought against him and he was sentenced in absence to five years penal servitude he prudently remained in exile

Arnold, Edward (1740-1801) Amer general at fifteen he enlisted in the Eng army but soon deserted and adopted a mercantile life in the war of Independence his skill and gallantry were especially exhibited in the siege of Quebec and the victories of Ridge field and Bemis entered into negotiation with the Brit commander and treacherously obtained the command of W Point with the intention of surrendering it to the enemy the capture of Andre betrayed his duplicity and the traitor fled in disgrace to the Eng army at New York appointed brigadier general and after serving against his countrymen retired to London

Arnold, Sir Edwin (1832-1904) Brit journalist and poet for several years principal of the Govt Sanscrit College at Poona India but resigned his post in 1861 when he became connected with the *Daily Telegraph*, his *Light of Asia* (1879) achieved extraordinary popularity

Arnold, Matthew (1822-88), Brit poet critic and educationist eldest son of Dr Arnold of Rugby elected Fellow of Oriel College (1845) and in 1861 was appointed Lay Inspector of Schools for ten years (1857-67) he held the chair of poetry at Oxford amongst his productions may be noted *The Strayed Reveller* *Literature and Dogma* *God and the Bible* and *Lessays in Criticism*

Arnold, Thomas (1795-1842) Brit divine and educationist appointed headmaster of Rugby school in 1828 he raised that institution beyond all precedent of the Broad Church school of thought he was a vigorous opposer of the Tractarian movement appointed professor of modern history at Oxford (1841) his best known works are his edition of *Theophrastus* his *History of Rome* (unfinished) and his sermons

Arnold-Forster, Hugh Oakley (1855-1909), Brit politician and author, sec to the Admiralty (1900-3), sec for war (1903-6) his works include *The Citizen Reader* and *A History of England*

Arpaia, Giuseppe Cesare (1560-1640) It painter his pictures include *The Ascension* at San Giovanni in Laterano, *The Rape of the Sabinas*, and *The Combat of the Horatii*

Arrol, Sir William (1829-1913), Brit engineer, built the Forth and Tower bridges and Manchester Ship Canal N.P. (1895-1906)

Artaxerxes I (died 425 B.C.), King of Persia (465 B.C.), quelled an Eg revolt in 456, but was defeated by the Athenians (449)

Artaxerxes II (455-382 B.C.) (Mnemon), King of Persia, succeeded his father, Darius II, 405 B.C., at the battle of Cunaxa he crushed a revolt of his brother Cyrus, and also engaged in wars with the Gls, with Cyprus, and with Eg

Artaxerxes III (died 339 B.C.), King of Persia, son and successor of the preceding to secure his position put the rest of his family to death, and after a troubled reign was poisoned

Arthur, real or fabulous King of Brit, probably flourished at the beginning of the 6th cent and ruled over the S.W. portion of the island, is said to have gained twelve victories over the Anglian invaders, his nephew Modred loved Queen Guinevere and raised the standard of rebellion, at Camlan was fought the battle round which romance has so thickly gathered, and in which Arthur was slain

Asham, Robert (1515?-98), Eng scholar among the first to introduce the study of Gk at Cambridge, and was also eminent as a Latin writer directed the studies of Princess Elizabeth Latin secretary to Edward VI and Queen Mary ("The Schoolmaster")

Ashburnham, John (1604-71), Eng royalist a member of the Long Parl, he only escaped arrest in 1647 by fleeing to Fr, afterwards suspected of infidelity in connexion with the surrender of the king, but on the Restoration was appointed groom of the bed chamber to Charles II

Ashburton, Alexander Baring, Baron (1774-1848), Brit statesman and financier, son of Sir F. Baring succeeded to the headship of the great financial firm in 1810. Pres of the Board of Trade (1834), and in 1842 negotiated the Ashburton treaty with the United States

Ashfield, Albert Henry Stanley, 1st Baron (born 1876), Brit politician and business man managing director of the Underground Rly Co and the London General Omnibus Co (1910), Pres of the Board of Trade (1916-19)

Ashmole, Elias (1617-92), Eng astrologer and antiquary held the appointment of Windsor Herald and published the "History of the Order of the Garter", presented to the University of Oxford his valuable collection of coins, apocrypha, and manuscripts now housed in the Ashmolean Museum

Aiskwith, George Hanham, 1st Baron (born 1861), Brit civil servant chief industrial commissioner (1911), raised to the peerage (1919), he was for long an arbitrator in industrial disputes

Asoka, Emperor of India ascended the throne (264 B.C.), converted to Buddhism sent missionaries to China, Burma, Ceylon, and even, it is stated, to Europe and Eg kingdom extended from the Kabul River to Bengal, and from Nepal on the N to the Deccan on the S

Asquith, Henry Herbert. See Oxford and Asquith

Asquith, Jacob Baron (1579-1652), Eng royalist soldier took part in engagements at Edgehill (1642), and at Naseby (1645), was in command of the one successful wing of the army

Asser, John Jacob (1763-1848), Amer merchant of Ger descent, who traded in New York, and realized an immense fortune, founded the Astor Library in New York

Aster, Nancy Withler, Viscountess (born 1879), first woman to sit in the Brit House of Commons (1919)

Athanasius, Saint (296?-373), Bishop of Alexandria, came into prominence at the Council of Nice (325), succeeded to the see of Alexandria (328), but of the 46 remaining years of his life, 20 were spent in banishment, he was five times driven from his bishopric, his writings, especially the "Apology," addressed to the Emperor

Constantine, have helped to make his name famous

Atelstan (896-940), King of the West Saxons and Mercians, son and successor of Edward the Elder, an able monarch, whose authority was recognized by the other kings of Brit, the great victory of Brunanburh (937), practically established the supremacy of the W. Saxon throne

Atterbury, Francis (1662-1732), Eng divine; went to London as chaplain to William and Mary, and Queen Anne (1691), was promoted to the bishopric of Rochester and deanery of Westminster (1713), on the death of the queen he advocated the cause of the Pretender, refusing to sign the royal declaration of the bishops (1715), in 1723 he was deprived of his dignities and outlawed, he then retired to Paris

Athens, Titus Pomponius (109-32 B.C.) Rom author, remembered as the friend of Cicero, who wrote to him the celebrated series of letters

Attila (406?-453), King of the Huns, called the Scourge of God, after ravaging the N and laying Theodosius the Younger under tribute, he entered Gaul but was defeated with loss by Aetius and Theodoric at the battle of Met, passing into Italy, he destroyed Aquileia, and was only deterred from advancing on Rome by the entreaties of Pope Leo I

Auber, Daniel François Esprit (1782-1871), Fr composer, "La Muette de Portici" ("Maometto") was produced in 1828, and "Le Rêve d'Amour" in 1870

Aubigné, Théodore Agrippa d' (1552-1630), Fr poet, soldier, and historian aided with the Huguenots in the religious wars of Fr, and after the capture of Rochelle entered the service of Henry IV left many works, including a "Universal History"

Auckland, George Eden, Earl of (1784-1849), governor general of India during Afghan war (1839-42), recalled on change of ministry (1841), and in 1844 appointed 1st Lord of the Admiralty

Audley of Walden, Thomas, Baron (1488-1554), Lord Chancellor of Eng

Audran, Gérard (1640-1703), Fr engraver, most celebrated of the family of artists of that name

Audubon, John James (1780-1851), Amer naturalist, of Fr descent, the first of the four volumes of his great work "The Birds of America" appeared in 1826, followed by "American Ornithological Biography"

Auerbach, Barthold (1812-92), Ger novelist, reputation established by the publication in 1843, of his "Village Tales from the Black Forest", wrote many other novels

Augeran, Pierre François Charles, Duc de Castiglione (1767-1816), Marshal of Fr, served in It under Napoleon, and appointed to the command of the army of Holland and the Lower Rhine, was present at the battles of Lundeau, Jena, and Eylau, and after an unsuccessful campaign in Sp took part in the battle of Leipzig, on the abdication of the emperor gave his services to the Bourbons

Augustine, Saint (354-430), most distinguished of the Latin fathers of the Christian Church, born at Tagaste in Numidia, N Africa, while a student at Carthage he fell into habits of dissipation, to the great distress of his widowed mother Monica, leaving for Italy (383), at Milan he obtained the professorship of rhetoric, but resigned it on his conversion to Christianity, returning to Africa he sold his patrimony to benefit the poor, and became Bishop of Hippo (391), in 429 the Vandals under Genseric reached the gates of Hippo, and Augustine died in the third month of the siege, worn out with hardships endured in the cause of his people, his two greatest works are the "Confessions," and "The City of God"

Augustine, Saint (died 604), 1st Archbishop of Canterbury, sent by Pope Gregory I (596), to convert the Eng to Christianity, established himself at Canter-

bury, where he founded a monastery on the site of the present cath and pursued his missionary labours

Augustus, Gaius Julius Caesar Octavianus (63 B.C.-A.D. 14), first Rom emperor, was the son of Octavius by Alia, a daughter of Julia, the sister of Julius Caesar, at the age of 19, upon receiving the news of his great-uncle's murder, he set out for Italy, and joining the republican party defeated Antony, and returning to Rome compelled the Senate to elect him consul, subsequently an arrangement was effected between Augustus, Antony, and Lepidus to divide the Rom world between them, the battle of Philippi left Augustus and Antony with no opponent but Pompey, and a rupture which again broke out between them was healed by the marriage of Antony with Octavia, sister to Augustus, when a new division of the prows was made, the w falling to Augustus and the E to Antony, while Lepidus obtained Africa. Pompey and Lepidus fell next before the power of Augustus, and Antony, who had repudiated his wife to marry Cleopatra, was completely defeated in a fight near Actium, (31 B.C.) upon the death of Antony, Augustus became undisputed master of the world at the age of 32

Augustus (1526-86), Elector of Saxony, succeeded his brother Moritz in 1553, defeated and imprisoned his rival, John Frederick, largely extended his dominions, and drew up the code of laws known by his name, though a zealous supporter of Lutheranism, he persecuted the followers of Melancthon

Augustus (1670-1733), King of Poland and Elector of Saxony, succeeded his brother John George IV (1694) and three years later, with the aid of Austria and much bribery, procured his own election to the throne of Poland, allied himself with Russia and Denmark against Sweden, but was defeated at Chosow and Pultusk, and driven from his throne in 1708, on downfall of Charles XII, Augustus was recalled to Poland

Augustus (1696-1763), King of Poland and Elector of Saxony, son of the preceding, whom he succeeded in 1733, being supported by the Rus against his rival Stanislaus he was embroiled with Frederick II of Prussia, from whom he had to purchase peace

Augustus I (1750-1827), first King of Saxony joined the league formed by Frederick the Great in 1778, after Jena he followed Napoleon, and lost a portion of his kingdom by the battle of Leipzig

Aumale, Charles, Duke d' (died 1831), Fr statesman supported the Guises against the Huguenots, governor of Paris in 1588, he held Paris, but lost the battles of Senlis, Arques, and Ivry, died in exile

Aurelian (212-76), Rom emperor, son of a peasant, entered the Rom army and attracted the notice of the Emperor Valerian and Claudius, on the death of the latter in 270, was proclaimed emperor during his short reign the Goths and Vandals were subdued, the Alamanni, who threatened Rome itself, were exterminated, Palmyra was sacked, and in the splendid triumph of Aurelian were led captive Tetricus, the rival Emperor of Gaul, and Zenobia, Queen of the East

Aurelius, Antoninus Marcus (121-80), Rom emperor, adopted son of Antoninus Pius, to whose throne he succeeded in 161, and took as associate Lucius Verus, an adherent of the Stoic school of philosophy, his "Meditations" are still read, most of his reign was disturbed by wars with the Germans

Aurangzeb or Aurangzeb (1618-1707), Mogul Emperor of India, son of Shah Jehan; he seized the throne (1658), extended his dominions by conquests in Tibet, Golkonda, and the Mahratta territory

Austen, Jane (1775-1817), Eng novelist, 1796

Austin, Alfred (1835-1913), Editor of *The National Review* (1863-93), Poet Laureate (1896-1913)

Avebury, John Lubbock, 1st Baron (1834-1913), Brit banker, archaeologist and

scientist, his writings include *Ants Bees and Wasps* (1882), *"The Pleasures of Life"* (1887), and *"The Beauties of Nature"* (1892), 1893

Aventinus, Johannes Thurmayer (1477-1534), "father of Bavarian historiography" wrote a history of his country in seven volumes (1556)

Ayasha (610-77), "Mother of the Faithful," was the favourite wife of Moham med who married her in her 9th year after his death she caused the assassination of Caliph Othman, but was defeated by Ali at the battle of Basrah

Aylmer, Sir Fenton John (born 1862) Brit soldier, served in Burma on Indian frontier and in 1915 attempted to relieve Kut (Iraq), won VC in Kashmir (1897)

Ayrton, William Edward (1847-1908) Brit scientist professor of electrical engineering Central Technical College South Kensington, 1884

Aytoun, William Edmonstone (1813-65) Scottish poet professor of literature at the University of Edinburgh amongst his works are the *Lays of the Scottish Cavaliers* (1848) an edition of the *Scottish Ballads* (1858) and *Bon Gairth's Book of Ballads* in collaboration with Sir Theodore Martin

Ayub Khan (1875-1914) Amir of Afghanistan on the abdication of his brother Yakub Khan (1880) advanced upon Kandahar and defeated General Burrows at Maiwand but on the arrival of General Roberts his forces were routed and himself compelled to flee another victory preceded a second defeat at Kandahar in 1881, and Ayub withdrew to Peshawar surrendered to Gt Brit (1887)

Babbage, Charles (1792-1871) Brit mathematician, Lucian professor at Cambridge (forth devoted to the construction of a calculating machine

Bach, Johann Sebastian (1685-1750) Ger musician and composer 665

Bacon, Francis (Baron Verulam, and Viscount St Albans) (1561-1626) Eng jurist and philosopher, 1441

Bacon, Sir Reginald Hugh Spencer (born 1863), Brit admiral, commanded the Dover patrol 1915-18

Bacon, Roger (1214?-92), Eng monk and philosopher, 417

Baden-Powell, Sir Robert (born 1867) Brit general 457, 38

Baderer, Karl (1861-59) Ger publisher founder of the Guide books named after him

Baffin, William (1584-1622), Eng Arctic explorer, in 1614 joined an expedition to Baffinbergen, and in 1616 set out in the *Discovery* to find the NW passage though unsuccessful Baffin persisted farther than any navigator before him killed at the siege of Ormuz

Bagehot, Walter (1826-77) Brit economist and writer while in his father's bank at Langport wrote works on politics and economics of which the chief are *London and Street* and *The English Constitution* editor of the *Economist* (1860-77)

Bain, Alexander (1818-1903) Brit philosopher, chief works: *"The Senses and the Intellect"*, *"The Emotions and the Will"*, and *Mind and Body*

Baker, Sir Benjamin (1840-1907), Brit civil engineer, assisted in the building of the London Underground and tube railways the Forth bridge, the Aswan dam and Avonmouth docks

Baker, Sir Samuel White (1821-99) Brit explorer, 513

Baham, a prophet the son of Beer, was sent for by Balak, King of the Moabites, to curse the Israelites on their journey to the promised land but remained to bless them killed in a battle between the Midianites and Israelites

Balboa, Vasco Nunez de (1475-1517), Sp navigator, discoverer of the Pacific, went from Sp to St Domingo with Rodrigo de Barcklas, and thence to escape his creditors, to Darien, with Enciso in 1510, despising the latter, he ably ruled the colony for some years, and then, instigated by native stories of the wealth

of Peru he crossed the Isthmus, of Panama (1513) discovering the Pacific Ocean superceded by Pedrarias Davila (1514) who executed him on an old charge

Baldwin, Stanley (born 1867), Brit statesman, 517

Balla, Michael William (1808-70), Ir musical composer, his most popular work *"The Bohemian Girl"* was produced at Drury Lane (1844)

Balfour, Arthur James, Earl of (born 1848) Brit statesman 565

Balut, Edward (died 1367), King of Scotland on the death of John Balut on the death of Robert Bruce invaded Scot (1332) and after defeating the Regent Mar was crowned at Stone swore fealty to Edward III and made over Berwick, for which he was driven from Scot by the revolted nobles eventually sold his claim to the throne to Edward III for a pension and a sum down

Balut, John (1248-1315) King of Scotland on the death of Margaret, Balut and Robert Bruce invited Edward I to decide between them and Edward favoured Balut who swore fealty to him on taking the crown in 1292 During the Fr war of 1295 Balut renounced his fealty to Edward who invaded Scot after being a prisoner in London for three years Balut was allowed to go to Normandy where he died

Balfour, Robert Michael (1825-94), Brit author of books for boys including *The Coral Island* (1857) and *The Dog* (runce) (1860)

Balzac, Honoré de (1799-1850) Fr novelist, he obtained no public recognition till the appearance of his *Physiologie du Mariage* (1829), but afterwards he continued to write with increasing success in 1848 he married Countess Hanska The Eng edition of his *Human Comedy* runs to 40 vols

Baneroff, George (1800-21), Amer historian in 1845 became sec of the Navy from 1846-49 was Amer minister at the Court of St James and in 1867 was appointed minister to Prus wrote *The History of the United States*

Baneroff, Sir Squire (born 1841) Brit actor associated with Marie Wilton whom he married, in management of Prince of Wales Theatre, 1061

Banks, Sir Joseph (1749-1820) Brit naturalist after making a botanical exploration of Newfoundland and Labrador (1768) joined Captain Cook's expedition as naturalist and visited 5 Amer, Aus, and New Guinea, afterwards going to Iceland, in 1777 elected Pres of the Royal Society, and in 1781 created a baronet

Banting, Frederick Grant, Brit doctor, discovered insulin, a cur for diabetes, awarded Nobel prize (1923)

Barbarossa, name of family of 16th cent Turk pirates, of whom best known members are Aron, Ismael, and Hassan

Barbault, Anna Letitia (1744-1825) Brit writer compiled collection of works of 19 novelists with biographical and critical notices wrote with her brother, John Akia, *Evenings at Home*

Barbour, John (1816?-82), Scot poet and chronicler, wrote *"The Bruce"*, a patriotic epic

Barclay, Florence Louisa (1862-1921) Eng novelist, of her books, marked by strong love interest and religious feeling, the best known is the immensely popular *The Rosary* others are *The Mistress of Shalstone* and *"The Broken Halo"*

Barclay, Robert (1848-90), Scot champion of the Quakers his *Apology for the True Christian Divinity* is "till a standard work on the Quakers"

Barham, Richard Harris (1788-1845), Brit writer, author of the *"Ingoldsby Legends"*

Barmp-Goubi, Sabine (1834-1924), Eng author, besides the *"Lives of the Saints"* and other theological antiquarian works, achieved great success as a novelist

Barker, Harley Granville (born 1877), Brit dramatist, disciple of George Bernard Shaw wrote *"The Marrying of Anne Leese"*, and *"The Voysey Inheritance"*

Barnabas, Levite of Cyprus an early

Christian convert introduced Paul to the Church in Jerusalem The two quarrelled, and Barnabas went to Cyprus

Barnardo, Thomas John (1845-1905), Brit philanthropist founded Barnardo's homes for destitute children

Barnet, Barnett Isaacs (1852-97), Anglo-Jewish financier, known as Barney Barnato, went to S Africa in 1873, and became diamond magnate and member of Cape pari while returning to England, threw himself overboard

Barnby, Sir Joseph (1838-1896), Brit musician, his choir nucleus of the Royal Choral Society principal of Guildhall School of Music (1892-6) set Tennyson's *Sweet and Low*

Barnes, George Knoll (born 1859), Brit labour politician in 1917 became Minister of Labour in war cabinet, British representative at Paris Peace Conference

Barnesveldt, Jan van Olden (1547-1619), Dutch statesman sent to Eng to offer the Dutch crown to Elizabeth and again to conclude an alliance with James I against Sp used his influence to obtain the appointment of Maurice of Nassau as Stadtholder in 1587 Maurice became jealous of his patron and tried to excite distrust against him, by raising a corps of militia to suppress riots, gave Maurice an excuse for arraigning him for high treason and he was executed

Barnfield, Richard (1874-1927) Eng poet, friend of Michael Drayton and Thomas Watson, wrote *The Affectionate Shepherd*, two of his poems included in Shakespeare's *The Passionate Pilgrim*

Barnum, Phineas Taylor (1810-1891), Amer showman brought out "Tom Thurb," and introduced Jenny Lind to the Amer public, twice visited Europe

Barnie, Sir James Matthew (born 1860), Scot novelist and dramatist, 1235

Barr, Sir Charles (1795-1860) Brit architect designed the Reform Club London, and the Houses of Parliament knighted in 1862 buried in Westminster Abbey

Bartmann, pseudonym of Luigi da Costa Ricci Brit author served on Jelliffe's battleship at battle of Iceland wrote *"Naval Occasions"* *"Behind the Veil"* *"The Story of the Q Hosts"*

Bartoloni, Francesco (1725-1815), It engraver, in 1764 settled in Eng, one of the original painter members of the Royal Academy produced immense number of engravings of works of Cipriani, Angelica Kauffman, Sir Joshua Reynolds, Romney, etc

Barye, Antoine Louis (1798-1875), Fr sculptor his notable animal studies include *Jaguar Devouring a Hare* *"The Sea and the Minotaur"* and *"Lapetus and Centaur"*

Baschkirzeff, Maria Konstantinovna (1860-84) Rus painter and writer, paintings include *"A Fairman Lady"* and *"The Meeting"* chiefly remembered for her autobiographical journal

Basil, Saint (329-379) known as Basil the Great, one of the fathers of the Church, founder of Eastern monasticism, instituted a monastery in Pontus in 370 made bishop of Caesarea, carried on a long struggle against Arianism

Bates, Harry (1850-99), Brit sculptor studied under Rodin and Dalon his works include *Love and Life*, *Hounds in Leash* and *Pandora*

Bates, Henry Walter (1826-92), Brit naturalist, accompanied Alfred Russel Wallace (1848) on an expedition to Brazil, and remained there 11 years, returning with valuable collections, wrote *The Naturalist on the Amazon*

Bateson, William (born 1861), Brit scientist appointed in 1908 professor of biology at Cambridge and in 1910 director of the John Innes Horticultural Institution, Merton Park, Surrey wrote *"Materials for the Study of Variation"* *"Problems of Genetics"* etc His sister, Mary Bateson (1865-1906), was a scholarly historian

Bax, Ernest Belfort (born 1854), Brit socialist and author, one of the originators of the socialist movement in Brit,

wrote on socialism, history and philosophy

Baxter, Richard (1615-91), Eng. Presbyterian divine, during the Civil War was with the army of the Parl. preaching to the soldiers, though he refused to support Cromwell in his assumption of the Protectorship, on the restoration was appointed one of the royal chaplains, in 1662 refused to subscribe to the Act of Uniformity, and sentenced to 18 months' imprisonment in 1684 by Judge Jeffreys. His best remembered work is "The Saint's Everlasting Rest."

Bayard, Pierre Terrail, Seigneur de (1475?-1524), Fr. soldier, "the knight without fear and without reproach" entering the service of Charles VIII, distinguished himself in tournaments, and in 1495, after the battle of Fornovo, was knighted. In 1503 he is said to have stopped single-handed a force of 200 Spaniards from crossing the bridge over the Garigliano. Francis I insisted on being knighted by none other than Bayard. In 1524 Bayard was sent to it to assist Bonivert in the war against Charles V, and while retreating, was mortally wounded.

Bayle, Pierre (1647-1706), Fr. man of letters, professor of philosophy in the university of Sedan, and afterwards at Rotterdam lost his professorship through the intrigues of enemies. His great encyclopedia, *Dictionnaire Historique et Critique*, was produced in 1697.

Beardsley, Aubrey (1872-98), Brit. black and white artist, made his name on the "Yellow Book" (1894-98) great master of line, died of consumption.

Beaumont, Henry (born 1857), Brit. prince, youngest daughter of Queen Victoria, married Henry, Prince of Battenberg (1885) whom she succeeded, on his death in 1896, as governor of the Isle of Wight, her daughter Victoria Eugenie Luise, married Alfonso XIII of Sp.

Beattie, James (1735-1803) Scot. poet, professor of moral philosophy in Marischal College, Aberdeen. In 1770 he published his *Essay on Truth*, a direct attack against David Hume, which won him a pension of £200, became the friend of Johnson, Goldsmith, and Sir Joshua Reynolds, his didactic poem, "The Minstrel" had a great success.

Beatty, David, 1st Earl (born 1871), Brit. sailor.

Beaumont, Topham (1789-80), Eng. man of wit and fashion, one of Dr. Johnson's circle.

Beaufort, Henry (died 1447), Eng. cardinal and statesman, son of John of Gaunt, made Bishop of Lincoln (1398), Chancellor in 1403, in 1404 Bishop of Winchester, in 1417 took part in the Council of Constance, in 1426 he was made cardinal, enormously wealthy, completed Winchester Cathedral.

Beauharnais, Eugene (1781-1824), Fr. soldier on Napoleon's staff in It. and Eg. appointed Viceroy of It. in 1805 declared her to the It. kingdom by Napoleon. Distinguished himself in 1809 in It. against the Austrians, held high command in the Rus. campaign where his masterly conduct of the It. contingent in the retreat from Moscow won Napoleon's admiration on the downfall of Napoleon bought the duchy of Leuchtenberg, retired to Munich, where he died.

Beaumarchais, Pierre Augustin Caron de (1732-99), Fr. dramatist, son of a watchmaker. His musical and inventive genius procured him an introduction to the court, became rich by marriage, by speculation and by supplying arms and provisions to the Americans during the War of Independence. His best plays are *The Barber of Seville* and *The Marriage of Figaro*, converted into operas by Mozart and Rossini respectively, accused of treason to the State, he took refuge in Hol. and Eng., returning eventually to Fr., where he died.

Beaumont, Francis (1586?-1616), Eng. dramatist, 1596.

Beaverbrook, William Maxwell Ashton, Baron (born 1879), Brit. politician, after a successful business career in Canada, settled in this country M.P.

for Ashton-under-Lyne (1910-15), knighted (1911), made a baronet and a peer (1916), early in World War made official recorder for the Canadians, for his success as keeper of Can. war records made in 1918 head of ministry of information, and Chancellor of the Duchy of Lancaster, became a proprietor of the *Daily Express*.

Behel, Ferdinand August (1840-1913), Ger. socialist, follower of Karl Marx, from 1871 member of the Reichstag, where he led the Social Democratic party, wrote books on socialism.

Becaria, Beniamino Cesare (1735-1794), It. jurist, in 1764 he published his great treatise, "Crimes and Punishments," which was an immediate success and on which came to be based many of the reforms in the penal codes of the chief European nations, in 1768 appointed to the chair of law and economy at Milan, which was founded expressly for him.

Beck, Adolf (died 1909), Nor. victim of miscarriage of justice. In 1877 John Smith, who gave out that he was Lord Willoughby had been sentenced to penal servitude for imposing on London women with worthless cheques. Similar frauds broke out again in 1894 and in 1896 Beck was identified as John Smith and sentenced to seven years' penal servitude. Released in 1901 he was on the point of being again sentenced in 1904, when John Smith was caught. Beck was awarded £5,000 compensation.

Becket, St. Thomas (1118?-70), Eng. prelate, obtained the patronage of Theobald, Archbishop of Canterbury, who made him archdeacon. Henry II took him into his favour and made him his chancellor. In 1162 he succeeded Theobald as Archbishop of Canterbury, and immediately resigned the chancellorship. He opposed Henry strongly on the question of the privileges of the clergy. In 1164 the Constitutions of Clarendon were passed to which Becket refused to agree, and he appealed to the Pope. In the same year a council proclaimed the forfeiture of his goods and the confiscation of the revenues of his see. In 1170 he returned from the Continent and promptly excommunicated the De Broc family who had confiscated some of his lands. The king was incensed at this action, but it is improbable that he was responsible for the sequel, four knights, in the hope of gaining Henry's favour, set off for Canterbury and murdered Becket in the cathedral, his shrine became a famous place of pilgrimage, he was canonized in 1173.

Beckford, William (1760-1844), Brit. author, son of Alderman Beckford, whose huge fortune he inherited, patron of letters, bought Gibbon's library in 1787 he sprang into fame by writing in Fr. his amazing oriental romance "The History of the Caliph Vathek," spent over £250,000 on a magnificent mansion at Fonthill, Wilt.

Bede or Bede (672?-735), Eng. historian, generally known as the "venerable Bede," 1808.

Beecham, Sir Thomas, Bart. (born 1879), Brit. musical composer and conductor, grandson of the originator of "Beecham's Pills," did much to encourage opera in London by his productions at Covent Garden and Drury Lane.

Beerbohm, Max (born 1872), Brit. caricaturist and author, half brother of Sir Herbert Beerbohm Tree, his satirical cartoons, which include "The Poet's Corner" (1904), and "Fifty Caricatures" (1918), poke fun at writers, artists, politicians, and others, his writings comprise "Zuleika Dobson," "The Happy Hypocrite," and "Seven Men."

Beethoven, Ludwig van (1770-1827), Ger. composer and musician, 61.

Behmen, Jacob (1575-1624), Ger. mystic, see Boehme.

Behn, Aphra or Afra (1640-89), Eng. dramatist and novelist. Her early life was spent in Surinam, where she was friendly with the native prince, Oroonoko, whose adventures she described in her novel of that name was employed in the secret service in the Netherlands

but gave up diplomacy for writing, her witty but coarse plays include *The Forced Marriage*, *The Town Fop*, and *The Roundheads*.

Behring, Emil Adolf (1854-1917), Ger. scientist, discoverer of the antitoxins of diphtheria and tetanus awarded the Nobel prize (1901).

Bell, Sir George Thomas (1850-1924) Brit. physicist, developed with William Young a new method of retorting oil shale, which enabled the industry to compete with imported petroleum products, in 1891 opened at Leith first factory for synthetic production of alkali cyanides, specialized in fuel economy and smoke prevention, during World War member of Admiralty Board of Inventions and Research.

Bel, Alfred (1858-1906), Ang. Jew financier, after experience in S. Africa founded, with Julius Wernher, a diamond merchant's business in London, known after 1889 as Wernher, Beit and Co. associate controller with Cecil Rhodes, of De Beers mines, a trustee of Rhodes, will, endowed a chair of Colonial history at Oxford.

Belshazzar, John Hay. Pen-name of Ian Hay.

Belisarius (505?-565), Byzantine general. As a youth served in Justinian's body guard, and when Justinian became emperor he was appointed commander of the Eastern army. In 530 won a signal victory over the Persians in 532 suppressed an insurrection in Constantinople, and in 534-5 conducted a victorious war against the Vandals in Africa. In 558 he destroyed the power of the Ostrogoths in It. He was soon after sent against the Persians, and in 559 he drove the Slavs and Huns from the walls of Constantinople. The emperor, who had constantly treated Belisarius with jealous distrust and ingratitude, now caused fresh indignities to be heaped on the great commander, who was imprisoned and deprived of his possessions. He was restored to favour before his death. The story of his ending his days as a blind beggar is unfounded.

Bell, Alexander, Graham (1847-1922), Scot.-Amer. scientist and inventor, 1868.

Bell, Sir Charles (1774-1842), Scot. anatomist, discoverer of the distinction between motor, sensory, and sensorimotor nerves, an achievement ranking with Harvey's discovery of the circulation of the blood.

Bell, Henry (1767-1830), a pioneer of steam navigation 1848.

Bellay, Joachim (1525?-60), Fr. poet, a member of the constellation of Fr. poet-called the Pleiade wrote odes, elegies, and hymns, but principally sonnets.

Belini, Gentile (1429-1507), Venetian painter, elder son of Jacopo Bellini. He visited Constantinople (1470) and painted the portrait of the Sultan. His most notable work is "The Preaching of St. Mark," at Milan.

Belini, Giovanni (1430?-1516), Venetian painter, younger son of Jacopo Bellini, and the teacher of Titian and Giorgione. Famous among his works are "The Madonna and Saints" in the Venice Academy, and "The Agony in the Garden," and the portrait of the Doge, Leonardo Loredano, both in the National Gallery, London.

Belini, Vincenzo (1801-33), It. musical composer in 1831 the production of his greatest opera *La Sonnambula*, established his reputation. This was followed by the tragic opera *Norma*, and in 1835 by *I Puritani*.

Belloc, (Jean Pierre) Hilaire (born 1870), Brit. author, before going to Balliol College, Oxford, he served as a driver in the 8th regiment of Fr. artillery, Liberal M.P. for Salford (1906-10), a prolific and graceful writer of essays, fiction, biography, military history, verse, and children's books, his works include "Robespierre," "Danton," "The Fifth to Rome," "Cautionary Tales," "Mr. Chatterbox's Plection," "A General sketch of the European War" (1915-16).

Belzoni, Giovanni Battista (1778-1823), It. explorer, in 1815 went to Eg. where he excavated Temple of Abu Simbel, and discovered the entrance to the second

Pyramid of Gizeh died on the way to Central Africa. He sent to England the bust of Ramesses II (Young Memnon) now in the Brit Museum.

Bembo, Pietro (1470-1547) It cardinal and scholar in 1512 appointed sec to Pope Leo IX in 1529 historiographer of Venice and later was created cardinal. His writings both prose and verse in It and Lat, are remarkable for their purity of style.

Benson, John (1633-1702) Eng admiral after taking part in the bombardment of St Malo (1693) and supervising the blockade of Dunkirk in 1696 he was sent to the West Indies where he chased four fr vessels under Du (1700) on which occasion his captains being mutinous he was forced to abandon the chase. In this action his leg was shattered by a chain shot and he died of the wound shortly afterwards.

Benzoni, Alexander Count (1849-1917) Bus diplomatist after being minister at Copenhagen (1897-1903) he was ambassador in London from 1903 till his death. Popular at court and in society he did much to maintain friendly relations between Brit and Rus.

Benedict, Sami (died 544?) It monk founder of western monasticism. Three years he lived a hermit's life in a cave near Subiaco where he returned after being abbot of a neighbouring monastery he then formed 12 monasteries in which his rules of life were observed the hostility of a priest drove Benedict to Monte Cassino where he built a monastery from which the Benedictine order spread all over Europe.

Benedict, name of 15 Popes. Benedict I was pope (753-8) during the incursions of the Lombards. Benedict II (684-5) was canonized. Benedict III (858-8) was for a short time opposed by an antipope appointed by the Emperor Louis II. Benedict IV (900-3) Benedict V (984) was elected by the Romans and taken by the Emperor Otto I to Ger where he died. Benedict VI (974-4) was deposed by a faction and murdered. Benedict VII (974-83) was a zealous supporter of monasticism. Benedict VIII (1012-24) was expelled by a faction but restored by the Emperor Henry II. Benedict IX (1033-4) was the puppet of a faction and after being deposed several times regained Benedict X (1080-8) was deposed by Hildebrand. Benedict XI (1303-4) probably poisoned after his death the papal residence was transferred to Avignon. Benedict XII (1334-42) ruled at Avignon entered into fruitless negotiations for the union of the Gr and Rom churches. Benedict XIII (1724-30) known for his liberality and piety left state affairs to cardinal de Tournai. Benedict XIV (1740-58) a notable a holier and a patron of learning improved the financial condition of the papal states and forbade the Jesuit missionaries to accommodate their teaching to heathen usages. Benedict XV (1914-22) worked nobly during the World War in obtaining the exchange of prisoners and in alleviating the sufferings of civilians.

Benedict, Sir Julius (1904-8) Eng Germanical composer born at Stuttgart from 1835 he lived in London in 1838 became conductor of English opera at Drury Lane where was produced his opera *The Gipsy's Warning*. *The Bride of Venice* and *The Crusaders*. In 1862 produced at Covent Garden his best known opera *The Lily of Killarney*.

Benois, Friedrich Eduard (1798-1854) Ger philosopher in 1832 succeeded Hegel as professor of philosophy at the Berlin University. He was a pioneer of modern psychology.

Bennett, (Emek) Arnold (born 1867) Eng novelist whose stories, especially those dealing with the live towns or pottery district of Eng are amazingly popular his books include *The Old Wives Tale*, *Clayhammer*, *Bild*, *Leaves*, *These Two in*, *Rueyuan Steps* of his plays *The Great Adventure* was a well-deserved success.

Bennett, James Gordon (1794-1872) Amer journalist, born in Scot, founded (1835)

the *New York Herald* later one of the most valuable newspaper properties in the U S A originated detailed reporting interviewing use of telegraph in reporting and the method of distribution by carriers.

Bennett, James Gordon (1841-1918) Amer newspaper proprietor son of the preceding from 1872 controlled the *New York Herald* sent H M Stanley to find Livingstone equipped the Jeannette Arctic expedition and founded (with John Mackay) the Commercial Cable Company took active interest in motor ing and other sports.

Bennett, Sir William Stensole (1816-1875) Eng musical composer studied at the Royal Academy of Music where his first pieces were produced went to Leipzig where he enjoyed the friendship and advice of Mendelssohn in 1856 appointed professor of music at Cambridge and conductor of the Philharmonic Soc and in 1866 principal of the R A M his compositions include the oratorio *The Women of Samaria* and the cantata *The May Queen*.

Benson, Arthur Christopher (born 1882) Eng author eldest son of Edward White Benson a master at Eton (1888-1903) elected master of Magdalene College (Cambridge) (1916) writings include *Lines of Rowett*, *Edward Fitzgerald and Tennyson* and *The Upton Letters* from a College Window and other essays.

Benson, Edward Frederic (born 1867) Eng novelist 3rd son of Edward White Benson his society novel *Dodo* brought him to the front others include *The Challeons*, *The House of Defence*, *David Blaize*.

Benson, Edward White (1829-96) arch bishop of Canterbury he succeeded Dr Jait (1883) some time assistant master at Rugby in 1859 he was chosen first headmaster of Wellington College in 1872 chancellor of the diocese of Lincoln in 1876 1st bishop of Truro.

Benson, Sir Francis Robert (born 1858) Eng actor played first with Henry Irving at the Lyceum (1882) long organized the Shakespeare festivals at Stratford on Avon founded a school of acting (1901).

Benson, Robert Hugh (1871-1914) Eng R C divine and writer son of Edward White Benson after taking Anglican orders was received in 1903 into the R C Church and later became privy chamberlain to Pope Pius X his writings include *By What Authority*, *The Light Invisible* and other novels confessions of a Convert and *Paradoxes of Catholicism*.

Bent, James Theodore (1852-97) Eng traveller made valuable archaeological researches in Asia Minor the Bahrein Isles Abyssinia Arabia and Mashona land was the first to examine minutely the great Zimbabwe in Rhodesia.

Bentham, Jeremy (1748-1832) Eng philosopher and jurist in 1776 published anonymously his *Fragment on Government* which was attributed to several of the greatest lawyers of the day. In 1789 appeared *Principles of Morals and Legislation* in 1792 he was made a R C citizen. Established the *Westminster Review* in 1823. He based his philosophy on the formula—the greatest happiness of the greatest number. After his death his body was dissected in accordance with the terms of his will.

Bentley, John Francis (1859-1902) Eng architect designed Westminster Cath and St Mary of the Angels, Bays water.

Bentley, Richard (1662-1742) Eng scholar in 1694 appointed royal librarian. He was involved in the controversy concerning the *Lustles of Phalaris* which led Swift to write *The Battle of the Books* in 1700 appointed Master of Trinity College Cambridge and in 1717 Regius Professor of Divinity.

Béranger, Pierre Jean de (1780-1867) Fr song writer after working as a printer's apprentice devoted himself to literature in the garret of his modest long received a pension from Louis Bonaparte and later obtained

a post in the Imperial University in 1821 and 1828 imprisoned for his republican sentiments. His songs include *Le Roi d'Yvetot*, *Le Vieux Drapeau* and *Les Souvenirs du Peuple*.

Berschold, Leopold, Count (born 1868) Austro-Hungarian statesman as ambassador to Rus and foreign minister (1912-15) strove in vain to further Austria's interests in Balkans in 1914 favoured war with Serbia and tried to obtain new allies for Central powers.

Beresford, Charles William, 1st Baron (1846-1918) Brit admiral better known as Lord Charles Beresford 378.

Berger, Hermann Cyrano de (1619-55) Fr novelist and dramatist reckless fighter and duellist famous for his tremendous nose from two of his romances. Swift is said to have received his inspiration for *Gulliver's Travels* subject of Rostand's drama *Cyrano de Bergerac*.

Berenson, Henry (born 1859) Fr philosopher denies claim of science to explain universe on mechanical principles writings include *Time and Free Will*, *Matter and Memory* and *Creative Evolution*.

Bering (Behring), Vitus (1680-1741) Dan navigator commissioned by Peter the Great to explore N E Asiatic coast discovered Bering Strait and Alaska.

Berkeley, George (1685-1753) Ir divine and philosopher in 1725 drew up a scheme for founding a college in the Bermudas and the Govt granted a charter and promised a grant in aid. Berkeley set out for the Bermudas but the money not being forthcoming the scheme had to be abandoned. In 1784 he was made Bishop of Cloyne his idealistic philosophy maintained that matter has no existence independent of mind.

Berlichingen, Goetz von (1480-1562) Ger knight and soldier of fortune known from using an iron hand in place of one he had lost as of the iron hand whose memory is perpetuated by Goethe's drama.

Berlioz, Hector (1803-69) Fr musical composer studied at Paris Conservatoire won Grand Prix de Rome (1830) several times visited Eng ardent admirer of Shakespeare father of modern orchestration picture 389.

Bernadotte, Jean Baptiste Jules (1764-1844) Ir general one of Napoleon's marshals elected crown prince of Sweden (1810) ruled as Charles XIV of Sweden and Norway (1818-44).

Bernard of Clairvaux St (1090-1158) Fr monk one of the most celebrated preachers of the Middle Ages entered the Cistercian monastery at Cîteaux, later went to found a branch monastery at Clairvaux of which he was made abbot and from which his fame and influence spread far and wide. Preached the Second Crusade (1146) He was canonized (1174).

Berners, John Beureste, 2nd Baron (1469-1558) Eng translator Chancellor of the Exchequer to Henry VIII and deputy of Calais (1520-38) his chief work was the translation of Froissart's *Chronicles*.

Berners, Dame Juliana (born 1368?) said to have been prioress of Sopwell Nunnery, near St Albans and daughter of Sir James Berners supposed author of treatises on hawking and hunting in the very early printed book, *The Book of St Albans* (1486).

Bernhard, Friedrich von (born 1849) Ger soldier and writer served in the war of 1870-71 returned from army (1900); became apostle of the gospel of *Traktathe* in 1912 appeared his famous book *Germany and the Next War*, fought in the World War.

Bernhardt, Sarah (1844-1923), Fr actress, 343.

Bernini, Giovanni Lorenzo (1598-1680) It architect sculptor and painter designed the great colonnade of St Peter's, Rome and the palace of Pope Urban VIII as a sculptor his Apollo and Daphne is his best known work, paintings of little merit.

Bernoulli or Bernoulli, Daniel (1700-82) member of a distinguished family of mathematicians originally of Antwerp and afterwards settled at Basel, in 1726 Peter the Great appointed him with his elder brother Nicolas to the chair of

mathematics at St Petersburg where he composed his treatise on hydrodynamics returning to Basel in 1733 he occupied chairs of anatomy, botany, and philosophy

Bernoulli, Jacques (1654-1705), uncle of the preceding, professor of mathematics at Basel from 1687, noted for his wide and successful application of the calculus

Bernoulli, Jean (1667-1748), brother of the preceding, discovered the exponential calculus, succeeded his brother Jacques in the chair of mathematics at Basel

Bernoulli, Jean (1710-80), son of the preceding, professor of mathematics at Basel contributed to knowledge of the theory of light and heat

Bernoulli, Jean (1744-1807), son of the preceding, at age of 19 appointed astronomer royal of Berlin became director of mathematical department of Berlin Academy

Bernoulli, Nicolaus (1687-1759), cousin of the preceding, professor of mathematics at Padua and of logic and law at Basel friend of Newton and Halley

Bernoulli, Nicolaus (1695-1726), cousin of the preceding, took degree of doctor of philosophy at age of 16, in 1723 professor of jurisprudence at Berne, in 1725, with his brother Daniel, professor of mathematics at St Petersburg

Bernstein, Eduard (born 1850), Ger social democratic politician and author of editorial staff of the *Social Democrat* (1881-90) in exile in London (1890-1907), deputy to the Reichstag (1901-1907, and 1912-18) after revolution was Sec of State for Treasury till 1919; leader of Conservative wing of Socialists; writings include "The History and Theory of Socialism"

Bernstorff, Johann Heinrich, Count (born 1802), Ger diplomatist, ambassador to U.S.A. from 1908 to 1917, when America entered the World War

Berry, James Gomez (born 1883), brother of Sir William Ewart Berry, with whom he is closely associated in business, chairman of the Infants' Hospital, London

Berry, Sir William Ewart, Bart. (born 1879), Brit journalist, founder of *The Advertising World* (1901) chairman and editor of *The Sunday Times* and joint proprietor of *The Financial Times*, *Graphic*, *Daily Graphic*, *Bystander*, *Kelly's Directories*, and Cassell and Co., Ltd.

Bert, Paul (1853-86), Fr scientist and politician, entered Chamber of Deputies (1876), Minister of Public Instruction (1881) in 1886 appointed resident general in Tongking and Annam his scientific work includes valuable researches in animal grafting, poisons, anaesthetics, and the influence of light on vegetation

Berthelot, Philippe Joseph Louis (born 1866), Ir diplomatist, son of the chemist Pierre Berthelot after a mission to the Far East (1902) returned to the Foreign Office trusted adviser of Brand and Clemenceau, became general sec of the Ministry of Foreign Affairs

Berthelot, Pierre Eugène Marcelin (1827-1907), Fr chemist in 1865 appointed professor of organic chemistry at the Collège de France Minister of Public Instruction (1884-87), Foreign Minister (1895-96), in 1889 sec of Academy of Sciences, creator of thermo chemistry, wrote valuable works on early history of chemistry

Berthollet, Claude Louis (1748-1822), Fr chemist, during the Fr revolution, when saltpetre could not be imported, he devised a process for making it, among his discoveries were potassium chlorate and fulminating silver, originated the bleaching of fabrics with chlorine

Bertram, Charles James (1723-85), Eng literary impostor, while Eng teacher at the school for naval cadets at Copenhagen he pretended that he had discovered a manuscript purporting to have been written by a monk called Richard of Westminster, dealing with Rom Brit, the forgery was so cleverly executed that it was accepted as genuine until the fraud was exposed by B. B. Woodward, librarian of Windsor Castle, in 1868

Berselius, Jons Jakob, Baron (1779-1848), Sw chemist, professor at Stockholm university discovered selenium, thorium and other chemical and metallic elements originated existing system of chemical formulation, chief works are "A Treatise on Chemistry," and "Essay on the Theory of Chemical Proportions"

Besant, Annie (born 1847), Eng theosophist, prominent in socialist and Indian nationalist movements founded Indian Home Rule League, in 1917 president of the Indian National Congress

Besant, Sir Walter (1835-1901), Eng author, in 1871 he began to write fiction in collaboration with James Rice "Ready money Mortaboy," and "The Golden Butterfly" gained for the authors a wide reputation, after Rice's death Besant wrote alone, his "All Sorts and Conditions of Men" inaugurating the movement which resulted in the establishment of the People's Palace in the Mile End Road, took great interest in professional side of literary work, he was one of the founders of the Society of Authors

Besnard, Paul Albert (born 1849) Fr painter, won the Prix de Rome (1874), equally brilliant in oil painting, water colour, pastel, and etching his large decorative works include frescoes at the Sorbonne and the Ecole de Pharmacie and twelve "Stations of the Cross" in the chapel of Berck hospital

Bessaron, Johannes (1395?-1472), Gk scholar, a monk of the order of St Basil, in the Peloponnese John VII Palaeologus made him Archbishop of Nicomedia and sent him to the Councils of Ferrara and Florence he was made a cardinal, and henceforth resided in It his house at Rome was a great resort of scholars, and he was prominent in spreading the new learning

Bessel, Friedrich Wilhelm (1784-1846), Ger astronomer in 1804 his calculation of the orbit of Halley's comet obtained him an appointment in the Lüneburg observatory in 1810 an observatory was constructed at Königsberg under Bessel's superintendence, and of this he was director from 1813 till his death founder of modern practical astronomy inventor of the mathematical device known as Bessel's functions

Bessmer, Sir Henry (1813-98), Eng inventor, 1877

Bess, William Thomas (1826-97), Eng organist, for many years organist at St George's Hall, Liverpool inaugurated the great organ at Albert Hall, London (1871), excelled particularly in Bach's organ works

Bethmann-Hollweg, Theobald von (1856-1921), Ger statesman, Chancellor of the Ger Empire (1909-1917) at his parting interview with the Brit ambassador, Sir Edward Goschen, in August, 1914, referred to the international treaty guaranteeing Belgium's neutrality as a "scrap of paper", having lost support in the Reichstag, resigned July 13 1917 in his retirement wrote "Reflections on the World War"

Bettlerien, Thomas (1635?-1710), Eng actor, son of a cook of Charles I Pope, Steele, Cibber, and other contemporary critics speak of him with the highest praise, and he was popular throughout his stage career, his wife, Mary Baunderson, was an admirable actress

Bewick, Thomas (1763-1838), Eng wood engraver, entered into partnership with a Newcastle wood engraver, Ralph Beilby, his former master, his engravings for the "History of Quadrupeds," which proved an immense success, appeared in 1790, and were followed in 1797-1804 by his finest and most famous work, "British Birds"

Boyle, Mary Henri. See Stendhal.

Bona or de Bona, Theodore (1519-1605), Fr theologian, after leading a wild life, reformed after a serious illness, and went to Geneva, where he joined the church of Calvin, professor of Gk at Lausanne (1549-59), in 1559 he went to Geneva and became Calvin's right-hand man, after Calvin's death he became the foremost figure among the Calvinists of the Continent, his writings include

a Latin version of the New Testament and a 'Life' of Calvin, presented the famous New Testament manuscript known as Codex D or Codex Bezae to Cambridge University

Bhowanagare, Sir Manoharjee Marwanjee (born 1851), Ind politician in 1873 succeeded his father as agent of the Kathiawar state of Bhaunagar, became head of the Parjee organization in Europe, Unionist M.P. for N.E. Bethnal Green (1895-1908), knighted (1897), during the World War published "The Verdict of India," in defence of Brit rule in India

Blaker, George Parker (1806-78), Eng engineer son of a stonemason his precocious grasp of figures led to his being exhibited as a "calculating boy", educated at Edinburgh University assisted George Stephenson, was a skilled practical engineer and also in great demand as a witness for committees on engineering schemes, was one of the engineers of the Blackwall Railway, and one of the founders of the Electric Telegraph Company

Biddle, John (1815-62) Eng religious controversialist known as the father of Eng Unitarianism, sent to prison and his book "Twelve Arguments," denying the doctrine of the Trinity, ordered to be burnt by the hangman after other terms of imprisonment banished to the Scilly Isles, but in 1862 he returned to London was again sent to prison where he died

Bierce, Ambrose (1842-1914?), Amer author, disappeared in Mexico, a master of the short story, his writings include "In the Midst of Life," "Shapes of Clay," "Write it Right"

Binet, Alfred (1857-1911), Fr psychologist director of the laboratory of psychology at the Sorbonne, advocated the use of hypnosis, invented tests for measuring intelligence—the Binet-Simon tests, his writings include "The Mind and the Brain"

Bingham, Edward Barry Stewart (born 1881) Brit sailor, son of the 5th Lord Clamorris in the World War served at the Battle of the Bight and the Battle of the Falklands won the V.C. at the Battle of Jutland for gallantry in leading his division of destroyers, his ship, *Ardor*, was sunk, and he was taken prisoner wrote "Falklands, Jutland, and the Bight"

Binyon, Laurence (born 1868) Eng poet and writer on art, in 1909 appointed Assistant Keeper of Oriental prints and drawings at the Brit Museum, his writings include "London Visions," "Porphyry and other Poems," "The Art of Asia," "Court Painters of the Great Mogul," and "The Four Years' War Poems" (1919) in 1920 his play, *Sakuntala*, was acted in London

Biot, Jean Baptiste (1774-1862), Fr physicist in 1800 became professor of physics at the Collège de France collaborated with Arago in measuring the arc of meridian in Sp., with Gay Lussac made first scientific balloon ascent, in 1840 received the Rumford medal of the Roy Soc for his observations on the polarization of light, which laid the foundation of the polarimetric analysis of sugar his writings include "Treatise on Physics," and many works on astronomy and geology

Birdwood, Sir William Russell (born 1865), Brit soldier, after serving in India and in the 8 African war, was appointed Quartermaster general (1912) in India and sec in the Army Dept., in 1914 Lord Kitchener gave him the command of the Australian forces in 1916 he led the Australians in the memorable landing at Anzac, earning the name of the "Soul of Anzac," conducted the successful withdrawal from Gallipoli created K.C.B. (1917), baronet and G.C.M.G. (1919), and received a grant of £10,000.

Birkbeck, George (1776-1841), Eng philanthropist, founder of mechanics' institutes, in 1799 he was appointed professor of natural philosophy at the Glasgow Andersonian institution, his lectures to working men in Glasgow proved so successful that on coming to London

in 1804 he determined to found a mechanics institute. In 1825 he succeeded in establishing the Birkbeck Institute, of which he was the director until his death. He was one of the founders of University College London.

Birkenhead, Frederick Edwin Smith, 1st Viscount, born (1872) at Birkenhead. Eng. lawyer and politician called to the bar (1899) obtained a large practice in Liverpool. In 1906 elected Conservative M.P. for the Walton division of Liverpool. In 1915 appointed Solicitor General and knighted and afterwards promoted Attorney General. In 1918 made a baronet. In 1919 created Lord Chancellor in the World War was head of the Press Bureau and also saw active service. In 1921 created Viscount (1921). See for India (1924).

Birmingham, George A. (born 1885) pen name of James Owen Hannay. Ir. novelist and playwright. In 1912 he became canon of St. Patrick's, Dublin. His novels showing the humorous side of Irish life include *Spanish Gold*, *Lilacs & Lovers*, and *The Lost Tribes*. His plays *General John Regan* was very popular.

Burrell, Augustine (born 1850). Eng. author and politician elected Liberal M.P. for West. (1890). In 1900 became a member of the Board of Education. Succeeded for Ir. (1907-16). retired from politics. (1918) his writings include lists of Andrew Marvell and Charlotte Brontë and Oliver Twist, and other volumes of graceful essays.

Bishop, Sir Henry Rowley (1786-1853) Eng. musical composer. In his opera *Clara the Maid of Milan* occurred the well-known song *Home Sweet Home*. In 1848 became professor of music at Oxford. His popularity rests on his ballads, plays and songs.

Bishop (née Bird), Isabella (1839-1904) Eng. traveller and author best known for her brightly written books on Asia. Unbroken Tracks in Japan, Journeys in Persia and Kurdistan. Among the Tibetans. The Yanket Valley and Beyond. In 1890 made the first lady fellow of the Royal Geographical Society.

Blaschke, Otto von (1815-98) Ger. soldier and statesman. 883.

Byrnes, Bjornstjerne (1812-1910) Nor. seaman, novelist and dramatist. 411.

Black Adam (1784-1874) Scot. publisher with his nephew Charles. Black published the 7th, 8th and 9th editions of the *Encyclopaedia Britannica*, purchased the copyright of the *Waverley* novels (1851) and of Dr. Quincey's works (1861). In 1856 on the retirement of Murray returned to Paris for a time. In the Liberal interest the business was removed to Boho Square, London.

Black, Joseph (1728-99) Brit. chemist, professor of chemistry at Glasgow University (1766-68). In 1756 he published a treatise *Experiments on Magnesia, Quicklime and other Alkaline Substances* which embodied his investigations, and gained him a high reputation. He originated the doctrine of latent heat and discovered magnesia. In 1766 he became professor of chemistry at Edinburgh.

Black, William (1841-98) Ir. novelist after studying some years in the study of art turned to writing. He was assistant editor of *The Daily News* (1869-74). His first novel *James Merril* published in 1864 was followed in 1869 by *In the Attire* and in 1871 by *A Daughter of Heth*, which was a pronounced success others include *The Strange Adventures of a Photon* and *A Princess of Thule*.

Blackie, John Stuart (1800-95) Scot. scholar and man of letters. In 1834 published a metrical translation of Goethe's *From 1841 to 1855 he was* of humanity at Aberdeen, and from 1855 till 1862 at professor of Greek at Edinburgh, where he helped to found the Celtic choir, an ancient Scot. nationalist. He was a picturesque figure of the Edinburgh of his day. His works include translations of *Aschylus* and *The Iliad*.

Blackmore, Richard Doddridge (1825-1900) Eng. novelist after practising for a short time at the bar he settled down as a market gardener at Teddington. In 1862 he published a translation of the *Georgics* and in 1864 his first novel *Clara Vaughan*. In 1869 he sprang into fame with his classic of the West Country *Lorna Doone* which was succeeded by several other novels of less popularity.

Blackstone, Sir William (1723-80) Eng. jurist son of a City merchant. In 1746 he was called to the bar but made little progress. Some lectures on law gained him a reputation and in 1763 he became the first Vinerian professor of common law at Oxford. In 1770 he was made a justice of common pleas. His famous *Commentaries on the Laws of England* (1765-69) was the first comprehensive survey of the Eng. legal system.

Blackwood, Algeonon (born 1869) Eng. novelist after an adventurous life settled down to writing being equally successful in tales of fantasy and horror made a name in 1906 with his novel *John Silence*. Other writings include *The Centaur*, *Day and Night*, *Stories*, *A Prisoner in Maryland*.

Blackwood, William (1776-1834) Scot. publisher founder of the famous Edinburgh firm began life as a bookseller. In 1816 he turned to publishing and started *Blackwood's Magazine* which numbered Scott, De Quincey and other eminent writers among its contributors.

Blair, Hugh (1718-1800) Scot. Fresh minister renowned as a preacher. His lectures on composition had such remarkable success that a chair of rhetoric and belles lettres was created for him at Edinburgh University. George III granted him a pension of £200.

Blake, Robert (1699-1807) Eng. admiral. 123.

Blake, William (1757-1827) Eng. poet, painter and engraver the son of a London tradesman he began life as an engraver's apprentice. His genius displayed itself early in poems and in those visions from which he drew his inspiration. In 1782 he married a girl of humble origin who proved a most devoted helpmeet. At this time Blake not only wrote poems and executed designs but he printed the books and coloured the designs with no other help than that of his wife. In this manner he published the *Songs of Innocence*, *The Book of Thel* and *The Marriage of Heaven and Hell* all illustrated with Blake's own designs. *The Gates of Paradise*, *Songs of Experience* and other poems were produced while the indefatigable Blake was executing orders for engravings. About 1801 Blake went to live at Felpham in Sussex and after his return in 1804 produced his poems *Jerusalem* and *Milton* and his illustrative designs for Robert Blair's *The Grave*.

Blanc (Jean Joseph), Louis (1811-82) Fr. socialist and historian. Taking to journalism he founded the *Revue du Progrès* in which his articles on the organization of labour attracted much attention. In 1848 he published *Le Travail des Dix Ans* (1840-48) a vehement attack upon the Bourbon rule. After the 1848 revolution he entered the provisional government and so great was his influence that a mob of workmen waited on him one day to offer him the dictatorship. Regarded as responsible for the failure of the national workshops which he had advocated he had to leave Fr. He lived for more than twenty years in Eng. where he wrote his histories of the great Revolution and of the 1848 Revolution. He returned to Paris in 1870, and was elected a deputy.

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Blanchford, Robert (born 1851) Eng. journalist and author wrote under the name of Bunnam largely on Socialism founded and edited *The Clarion* (1891) in 1910 attracted attention by a series of newspaper articles on the German question. His writings include *Marine England*, *Britain for the British* and *Not Guilty a Plea for the Bottom Dock*.

Blavatsky, Helena Petrovna (1831-91) Rus. theosophist of a Mecklenburg family settled in Rus. at the age of 17 married Nicephore Blavatsky from whom she separated in a few months. After wide travel including two attempts to penetrate Tibet from India she turned her attention to spiritualism and in 1875 founded at New York with Col. Olcott the Theosophical Society. Her principal books are *Isis Unveiled*, *The Secret Doctrine* and *The Key to Theosophy*.

Blessington, Marguerite, Countess of (1789-1849) Ir. writer. When quite a girl she was married to a Captain Farmer but the union lasted only a few months. In 1818 she married the Earl of Blessington and in 1821 went abroad with her husband and did not return to Eng. till after his death (1829). Her salon at Gore House, Kensington where she resided with Count D'Orsay her daughter's husband became a literary and artistic centre. In 1849 to escape their creditors they went to Paris where she died quite suddenly. She wrote *Conversations with Lord Byron*, *Idylls in Italy* and *Idylls in France* and edited *The Book of Beauty* and *The Keep*.

Bligh, William (1754-1817) Eng. admiral in 1787 commander of the *Bounty* which was sent out to introduce the bread fruit tree from the South Sea Islands to the W. Indies. When the vessel was three days out from Tahiti (Tahiti) the crew mutinied and turned Bligh with eighteen men adrift in the launch. After three months severe privations the castaways reached the island of Timor and thence Eng. Bligh published a *Narrative of the Mutiny on board H.M.S. Bounty*. In 1800 he was appointed governor of N.S. Wales, but after two years he was sent back to England on account of his harsh government.

Blind, Karl (1826-1907) Ger. revolutionist for his part in the Baden rising of 1848 was condemned to a long term of imprisonment but was liberated by the people. Being banished from Fr. and a fugitive from Ger. he went in 1863 to Eng. where he wrote much in support of struggling nationalities.

Blind, Mathilde (1841-96) Fng. author step daughter of the preceding her writings include *The Heather on Fire* (a protest against the evictions in the Highlands), *The Ascent of Man* (an epic of evolution), and a *Life of George Eliot* and she translated the *Memoirs of Marie Bashkirtseff*.

Blomfield, Sir Arthur William (1829-99) Eng. architect fourth son of Bishop Blomfield. Among his works are St. Barnabas at Oxford and the chapel of Exeter College and the restoration of St. Saviour's, Southwark.

Blomfield, Charles James (1786-1857) Eng. divine.

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Blondin, Charles (1824-97) Fr. tight rope walker (real name Jean François Gravelet) became famous by crossing Niagara Falls on a tight rope in 1856, performing various difficult feats on the journey, in 1861 turned somersaults

on stilts on a rope tied across the central transept of the Crystal Palace
Blood, Thomas (1618? 80) Irish adventurer known as Colonel Blood his estates having been confiscated at the Restoration took part in a plot for the assassination of the Duke of Ormonde in 1671 stole the Crown jewels from the Tower of London pardoned by Charles II and his estates restored

Bloomfield, Robert (1766-1823) Eng poet at the age of 15 came to London to work for a shoemaker contributed a poem to the *London Magazine* and in 1800 produced his remarkably successful poem *The Farmer's Boy* of which over 20,000 copies were sold in two years

Blew, John (1648-1708) Eng organist and musical composer in 1669 became organist of Westminster Abbey in 1695 organist of St Margaret's Westminster and in 1699 composer to the Chapel Royal wrote over 100 anthems

Bligny, Henri Georges Stephan Adolphe de (1823-1903) Fr journalist in 1873 became chief Paris correspondent to *The Times* in 1875 obtained information which enabled him to expose the Ger designs against France his 'troiscent scoop' was obtained in 1878 when *The Times* published the text of the Treaty of Berlin at the moment that the treaty was being signed in Ger

Blomberg, Gebhard Leberecht von (1742-1819) Prus soldier after serving in the Swedish army joined the Prus army in which he served during the later stages of the Seven Years war in 1813 was made a general field marshal in command of the army in Silesia defeated Marshal MacDonald at the Katzbach contributed largely to the victory of Leipzig entered Paris with the Allies in 1814 in which year he was made Prince of Wahlstadt visited London with the Allied sovereigns and was received with great enthusiasm in the Waterloo campaign he commanded the Prus army in Belgium and by outmanoeuvring Grouchy was able to arrive at Waterloo in time to help to decide the victory for the Allies and to pursue the routed Fr army

Blunt, Wilfrid Scawen (1840-1922) Eng poet and publicist ardent champion of Mohammedan aspirations defender of Arabi Pasha and Egyptian nationalists kept a famous stud of Arab horses his prose writings include *The Future of Islam* *The Wind and the Whirlwind* and *My Duties* a complete edition of his poems was published in 1914

Boudicca (Boadicea) (died A.D. 62) Brit warrior queen wife of Prasutagus, king of the Iceni having been treated with great indignity by the Romans she raised an army burned London Colchester and Verulam and almost destroyed the 9th Legion but was eventually defeated by Suetonius She then poisoned herself

Bouso, Manuel Maria Barbosa de (1761-1805) Portuguese poet whose fame rests chiefly on his sonnets which almost rival those of Camões

Boccaccio, Giovanni (1313-70) It author father of It prose in Naples acquired friendship of Petrarch in 1338 he published his most important work *The Decameron* a storehouse of characters and plots used by Chaucer Shakespeare and others wrote a commentary on the first 16 cantos of Dante's *Inferno* and a life of its author

Bode, Johann Elert (1747-1826) Ger astronomer for some years director of the Berlin Observatory gave currency to the Empirical rule known as Bode's Law his writings include *Guide to the Knowledge of the Starry Heavens*, and *Uranographia*

Bodin, Jean (1530-96) Fr political philosopher, founder of modern political economy, his six *Books of the Republic* set forth his ideal state

Bodkin, Sir Archibald Henry (born 1862) Brit lawyer, long treasury counsel at the Central Criminal Court, Recorder of Dover (1901), Director of Public Prosecutions (1920)

Bodley, George Frederik (1827-1907) Eng architect became leading ecclesiastical architect in the country his churches include All Saints Cambridge and Holy Trinity Kensington

Bodley, Sir Thomas (1545-1619) Eng diplomatist and scholar founder of the Bodleian Library at Oxford fellow of Merton College, Oxford between 1585 and 1596 employed on various political missions in Denmark, France, and the Netherlands retired from public life in 1598 and retired and endowed the old library at Oxford

Bosce, or Boyce, Heister (died 1586) Scot historian after being professor of philosophy at Farn he became first principal of the university of Aberdeen He wrote a history of Scot and lives of the Bishops of Morlich and Aberdeen

Boschi, Sir Joseph Edgar (1834-90) Brit sculptor of Hungarian origin settled in Eng in 1862 In 1878 he was elected A.R.A. and in 1882 E.A. in 1881 appointed sculptor in ordinary to Queen Victoria His works comprise statues of Dean Stanley in Westminster Abbey and of Thomas Carlyle on the Thames Embankment

Boskma (Bosman), Jakob (1515-1824) Ger mytic born of peasant parents he was first a shepherd then a shoemaker and finally made wooden gloves his philosophy embodied in *Aurora* and other works had much influence in Europe and involved him in trouble with the Church

Boschius, (474? 525?) Rom statesman and philosopher in 487 was Consul of Rome under the rule of Odoacer held the same office in 510 and 522 under Theodoric king of the Goths translated several of the Grk philosophers and wrote treatises of his own including *De Consolatione Philosophiae* executed

Boschini, François Adrien (1770-1834) Fr composer his works include *Le Dot de Suzette* (1798) *The Caliph of Baghdad* (1800) and *La Dame Blanche* (1815)

Bouillon-Lescaux, Nicolas (1638-1711) Fr poet works include *L'Art Poétique* (1674) and *Le Lutrin* (1674)

Bolsyn, Anne (1607-36) Queen of Eng 2nd wife of Henry VIII charged with criminal misconduct and beheaded

Bolingbroke, Henry St John, Viscount (1688-1751) Eng philosopher and statesman entered parliament (1701) as a Tory Sec of War (1704-08) Sec of State (1710-14) a strong adherent of the Stuart dynasty when the Hanoverian line was established Bolingbroke was dismissed and fled to Fr impeached and found guilty of high treason afterwards pardoned and returned to Eng (1723) and again went back to Fr (1735) works *Reflections upon Exile* *Letters on the Study and Use of History* and *Idea of a Patriot King*

Bolívar, Simon (1783-1830) The Liberator of South America born in Venezuela educated in Madrid travelled in Europe and U.S.A. when the revolt against the Sp yoke broke out in Venezuela he joined it but had to fly he returned (1813) and defeated Monte verde at Caracas the tide then turned and Bolívar fled to Jamaica but came back and won the battle of Boyaca (1819) resulting in the inauguration of the Republic of Colombia uniting Venezuela and New Granada with Bolívar as pres in 1822 went to help the Peruvians in their struggle for liberty and was victorious at Ayacucho (1824) Upper Peru became a separate republic with the title of Bolivia re-elected Pres of Colombia (1826 and 1828) when Venezuela separated from Colombia (1829) he resigned

Bonaparte, Carlo Maria (1746-1795), Corsican lawyer and adherent of Paoli father of Napoleon I

Bonaparte, Charles Lucien Jules (1803-57) Prince of Canino son of Lucien Bonaparte distinguished naturalist

Bonaparte, Jerome (1784-1860) King of Westphalia (1807-13), youngest brother of Napoleon I

Bonaparte, Joseph (1768-1844) King of Sp., eldest son of Carlo Bonaparte

King of Naples and the Two Sicilies (1806-08) King of Sp (1808-13) 714, 715

Bonaparte, Letitia (1760-1836) known as Madame Mère mother of Napoleon I 709

Bonaparte, Louis (1778-1846) King of Holland (1806-10) brother of Napoleon I father of Napoleon III 714, 716

Bonaparte, Louis (1866-79) son of Napoleon III and Empress Eugénie better known as the Prince Imperial in 1879 went with the expedition to Zululand and was killed in action 58, 60

Bonaparte, Lucien Lucien (1813-91), philologist second son of Lucien Bonaparte senator (1852)

Bonaparte Lucien (1776-1840), Prince of Canino brother of Napoleon I 712

Bonaparte, Maria Amunziata (Caroline) (1782-1839) Queen of Naples married Joachim Murat (1808) sister of Napoleon I 714

Bonaparte, Marie Anne Eliza (1777-1820) Princess of Pombino and Lucra and Grand Duchess of Tuscany sister of Napoleon I

Bonaparte, Marie Pauline (1780-1825) Duchess of Guastalla sister of Napoleon I 714

Bonaparte, Napoleon See Napoleon I

Bonaparte, Napoleon Joseph Charles Paul (1822-91) son of Jerome Bonaparte known as Plon Plon fought in Crimea (1854) exiled (1866)

Bonaparte, Pierre Napoleon (1815-81) third son of Lucien Bonaparte senator

Bose, Nazimud (born 1916) Brit eicher in Great Britain (hum., Cross Station was bought by the National Art Collections Fund)

Benheut, Marie Rosalie (1822-99) Fr painter of animal life 939

Besinas, Saint (680-755) Eng monk known as the Apostle of Germany massacred by heathen in Frisia founded the famous abbey of Fulda

Bernard, François (1493-1570) Fr priest known to fame as the original of Byron's *Prisoner of Chillon* on behalf of the liberties of Geneva he headed the resistance to the Duke of Savoy by whom he was imprisoned for four years in the Castle of Chillon from which he was liberated by the Bernese

Boet, Sir James, Bart (born 1850) Eng business builder founder of the extensive multiple shop concern *Boet's Cash Chemists Ltd*

Booth, Bramwell (born 1816) Eng religious leader son and successor of Wm Booth as General of Salvation Army 247

Booth, Edwin (1833-93) Amer actor foremost Amer tragedian of his time excelled in Shakespearean parts notably Hamlet Othello and King Lear

Booth, John Wilkes (1839-65) Amer actor brother of the preceding in the Civil War aided with the S and a assassin of Abraham Lincoln at Ford Theatre Washington

Booth, William (1829-1912) Eng minister founder of Salvation Army, 247

Borgia, Cesare (1476-1507) It soldier and statesman son of Rodrigo Borgia (Pop Alexander VI) by force treachery and murder he had nearly succeeded in obtaining ascendancy throughout the Rom States when the death of his father deprived him of his great source of power sent in 1504 a prisoner to Sp by Pop Julius II he escaped, and joined the King of Navarre's army against Castile Machiavelli dedicated *The Prince* to him

Borrow, George Henry (1803-81) Eng author, student of gay life and language in 1833 he was sent by the Bible Soc to St Petersburg and later to Sp, where he spent much time among the gipsies his writings include the immensely popular *Bible in Spain* *Lavengro*, and *The Romany Rye*

Bossuet, Jacques Bossuet (1627-1704) Fr divine, renowned for his eloquence His fame as a pulpit orator procured him the honour of preaching before Louis XIV, and he was appointed tutor to the Dauphin appointed bishop of Meaux (1661), his writings include *Discours sur l'Histoire Universelle*, and *Expos*

tion de la Doctrine de l'Eglise Catholique"

Boswell, James (1740-95), Scot writer, friend and biographer of Dr Johnson, in 1763 he first met Dr Johnson and in 1778 he was admitted to the Literary Club, and became the companion of the great doctor, whom he accompanied on his tour in the Hebrides; his famous "Life of Dr Johnson," the finest biography in the language was published in 1791, 777, 779, 782, 785.

Bothe, Louis (1882-1919), Boer soldier and statesman, commander-in-chief in S. African war, prominent in peace negotiations (1902), premier of the Union of S. Africa (1910), in the World War led a campaign against the Germans in S.W. Africa, at Paris Peace Conference (1919).

Bothwell, James Hepburn, Earl of (1536?-78), Scot noble, 3rd husband of Mary Queen of Scots, in 1567 murdered Darnley and carried off Queen Mary to Dunbar Castle and married her, imprisoned in Dragaholm Castle, in Zealand, where he died.

Botticelli, Sandro (1447-1510), Florentine painter, whose work is marked by intense poetic feeling and richly decorative style, among his notable pictures are "The Birth of Venus," "Spring," "The Adoration of the Magi," and three fine frescoes in the Vatican chapel Rome.

Bouhaer, François (1703-70), Fr. painter of the Pompadour era, styled the "Anna of Painting," some of his finest pictures are in the Wallace Collection, London.

Boussuault, Dion (1823-90), Fr. actor and playwright, among his very popular plays are *London Assurance*, *The Colleen Bawn*, *Arrah na Pogue*, and *The Shaughraun*.

Boulanger, Georges Ernest Jean Marie (1847-91), Fr. general and politician, minister of war in 1886, achieved great popularity with the mob, a threat of prosecution for intriguing with the Royalists drove him into exile and he committed suicide at Brussels.

Boulton, Matthew (1728-1804), Eng. engineer and inventor, assisted James Watt the inventor of the steam engine 844 845 846.

Bourbon, Charles, Duc de (1490-1527), commonly known as "The Constable," after serving in it was created Constable of Fr. fell into disfavor owing to the jealousy of the Fr. king and retired the service of the Emperor Charles V. contributed to the victory of Pavia where Francis I was taken prisoner, in 1527 he marched across the Alps and attacked Rome, but was shot by Benvenuto Cellini, according to that famous artist's "Life," just as his troops had gained the day.

Bourne, Arthur (born 1864), Eng. actor, helped to found the Oxford Unity Dramatic Soc., manager of the Criterion Theatre, London (with Charles Wyndham), and of the Garrick, London.

Bourdieu, Louis (1632-1704), Fr. Jesuit, famous as a preacher.

Bowdler, Thomas (1754-1825), Eng. editor, from his expurgated editions of Shakespeare and Gibbon comes the term to Bowdlerize.

Boyce, Charles Cunningham (1832-97), Eng. soldier, agent for the estates of the Earl of Lorne in Co. Mayo, Fr. for evicting tenants was subjected to social and commercial isolation known as "boy-cotting."

Boyle, Robert (1627-91), Ir. natural philosopher, youngest son of Richard Boyle, 1st Earl of Cork, one of the founders of the Roy. Soc., instituted the "Boyle Lectures" for the defence of Christianity and promulgated "Boyle's law," which had a great influence on the science of physics.

Brackley, Thomas Egerton, Viscount (1640-1617), Brit. statesman, became Solicitor General (1681), Attorney-General (1692), Master of the Rolls (1694), and Keeper of the Privy Seal (1696), and was Lord Chancellor under James I.

Bradbury, Sir John Swannell (born 1872), Brit. civil servant, joint permanent sec. to the Treasury (1918-19); signed the

currency notes—hence called "Bradbury's"—issued on outbreak of World War, chief Brit. representative at Paris on reparations commission (1919).

Braddock, Edward (1692?-1755), Brit. General, defeated and slain during Fr. and in war 1694, 1695.

Bradshaw, Mary Elizabeth (1837-1915), Eng. novelist, her first great success was made with "Lady Audley's Secret," published in 1862, this was followed by a series of over 50 sensational, skilfully constructed novels, including "Aurora Floyd" and "Henry Dunbar."

Bradlaugh, Charles (1833-91), Eng. politician, became known under the name of "Iconoclast" as a free-thought lecturer, in 1860 he founded the *National Reformer*, in 1880 he was returned for Northampton to Parl., but, refusing to take the oath, he was not allowed to take his seat until 1886, when he did so on affirmation, took a keen interest in, and had sound knowledge of, Indian affairs.

Brake, Tycho (1546-1601), early Dan. astronomer 154.

Brahms, Johannes (1833-97), Ger. pianist and composer 1237.

Braille, Louis (1809-52), Fr. educator and organist, invented Braille system of printing for the blind.

Brampton, Henry Hawkins, Baron (1817-1907), Eng. judge, better known as Sir Henry Hawkins, made his name as a great criminal lawyer in the Tichborne case, patron of boxing and the turf.

Brandes, Georg Morris Cohen (born 1842), Dan. author and literary critic, his writings include the valuable "Main Currents in 19th century Literature," and "Study of Shakespeare."

Brazgwyn, Frank (born 1867), Brit. painter and etcher, noted for broad effects and vivid colouring, his splendid panel, "Modern Commerce" in the Royal Exchange, London is typical of his work.

Branley, Edouard (born 1844), Fr. scientist, inventor of coherent for wireless 4.

Brassey, Thomas (1805-70), Eng. railway engineer, he constructed several of the important railways in Gr. Brit. and on the Continent, and many in India, Australia and S. Amer., besides the Grand Trunk Rly. of Canada.

Brassey, Thomas 1st Earl (1836-1918), Eng. politician, eldest son of the preceding (1st Lord of the Admiralty 1880-83), sec. to the Admiralty (1883-85), Gov. of Victoria (1895-1900), founded *The Naval Annual* often called "Brassey's," his world wide voyages in the *Swansea* are recorded by his wife.

Breanna, Louis (born 1852), Ir. engineer, inventor of the Brennan torpedo and the gyroscopic motor 11.

Brewster, Sir David (1781-1868), Scot. physicist, invented the kaleidoscope, invented or improved many optical instruments, and introduced polygonal lenses for lighthouses.

Brand, Arnold (born 1862), Fr. orator and statesman, several times premier between 1902 and 1912 708.

Bridge, Sir Frederick (1844-1924), Eng. musician, organist at Manchester Cathedral (1869-78), and at Westminster Abbey (1882-1918), composed many orchestral, cantata, anthems, etc.

Bridges, Robert (born 1844), Eng. poet, held medical posts until 1882, became poet laureate in 1913, his poems include "Prometheus," "Achilles in Scyros," and "Loe and Psyche."

Bright, John (1811-89), Eng. liberal statesman, 1037.

Brook, Sir Thomas (1847-1922), Eng. sculptor, studied under J. H. Foley, among his best-known works are "The Black Prince" at Leeds, and the Queen Victoria Memorial, London.

Brodrick, Henry See Irving, Sir Henry.

Bronte, Anne (1820-49), Eng. author, youngest sister of Charlotte Bronte, 277.

Bronte, Charlotte (1816-55), Eng. novelist, 277.

Bronte, Branwell (1817-48), brother of the Bronte sisters, 277.

Bronte, Emily (1818-48), sister of Charlotte Bronte, 277.

Bronte, Patrick (1786-1861), father of the Bronte sisters, 277.

Brooke, Sir James (1803-66), Rajah of Sarawak, Borneo, served in the E. India Co. and took part in the first Burmese war, in 1838 went to Borneo in his yacht and helped the Sultan to reduce the Dyak tribes of Sarawak, a service for which he was made Rajah (1841), he was succeeded as Rajah by his nephew Sir Charles Johnson Brooke (1829-1917), who was in turn succeeded by his son, Charles Vyner Brooke (born 1874).

Brooks, Rupert (1888-1915), Eng. poet, published 1st volume of poems in 1911, in the World War served as officer in the R.N.D. and died in hospital at Beyros, his works, which are full of promise and of the joy of life, include "1914 and other Poems."

Brooks, Stopford Augustus (1832-1916), Brit. preacher and man of letters, minister of St. James's chapel, York Street, London (1866-76), and of Bedford Chapel, Bloomsbury (1876-94), in 1872 appointed chaplain to Queen Victoria, in 1880 he became a Unitarian, his writings include "English Literature," "History of Early English Literature," and "Milton."

Brougham and Vaux, Henry, Baron (1778-1866), Brit. statesman and lawyer, became an advocate in 1800, one of the founders of the *Edinburgh Review*, conducted defence of Queen Caroline, took keen interest in law reform and popular education, in the Whig ministry (1830) became Lord Chancellor as Lord Chancellor, his overbearing manners made him extremely unpopular, and in the cabinet his inordinate vanity and reckless inconsistency made it impossible for his colleagues to work with him. He designed the vehicle known by his name.

Brown, Ferd. Madox (1821-93), Eng. painter in sympathy with, though not a member of, the Pre-Raphaelite school, among his best-known works are "The Last of England" in the Birmingham Art Gallery, "Christ Washing Peter's Feet," and "Work" (a street scene in Hampstead).

Brown, John (1810-82), Scot. doctor and author, his best-known writings are "Rab and His Friends," and "Horn Subseque."

Browne, Hubert Knight (1815-82), Brit. artist and caricaturist, known as "Phiz," illustrator of Dickens's, Charles Lever's, and Harrison Ainsworth's works in their original editions.

Browne, Sir Thomas (1606-82), Lux. physician and author, in 1637 settled in practice in Norwich, his best-known work is "Religio Medici," others include "Pseudodoxia Epidemica," "Hydrotafius," "Urn Burial," and "The Garden Cyrus," style stately, rhythmic, and highly latinized.

Browning, Elizabeth Barrett (1806-61), Lux. poet, wife of Robert Browning, 1403.

Browning, Robert (1812-89), Eng. poet, his first poem, "Pauline," was published when he was twenty-one, and two years later the dramatic poem, "Paracelsus," appeared, his first tragedy "St. John's Garden" in 1837, his next poem, "Sordello," then "nearly ready," did not appear until 1840, from 1841 to 1846 Browning brought out his "Bells and Pomegranates," in eight parts these contained three plays, or dramatic scenes, of which "Pippa Passes" is, perhaps, the best-known, four tragedies, including "A Blot on the 'Scutcheon," and thirty fresh dramatic lyrics, three of which, "The Pied Piper of Hamelin," "How they brought the good news from Ghent to Aix," and the "Lost Leader," are among the most popular of his works, in 1855 appeared "Men and Women," after marrying the poetess, Elizabeth Barrett, he settled in Florence, and remained there for fifteen years, until his wife's death in 1861, in 1864 he opened the third period of his work with "Dramatic Personae," and four years later his most important work, "The Ring and the Book," subsequently he produced fresh poems and plays, the

- most notable being "Frane at the Fair", he died after a short illness in Florence, and was buried in Poets' Corner, Westminster Abbey 1904.
- Bruce, James** (1730-94), Scot traveller, 83.
- Bruce Robert** (1274-1290), King of Scot., having entered into a conspiracy for the overthrow of the Eng. usurpation in Scot. and been betrayed, Bruce fled to Scot. and was crowned (1306), he was defeated by the Earl of Pembroke at Methven, but defeated him at Loudoun in 1307, then Edward I marched against him, but died on the way to Scot., Bruce struggled for three years, and ultimately established himself as King of Scot., Edward II marched against him in person, but was totally routed at Bannockburn (1314), in 1328 a peace was arranged.
- Brummell, George Bryan** (1778-1840), "Beau", the noted dandy and friend of George IV.
- Brunel, Isambard Kingdom** (1806-59), Eng. engineer, 85.
- Brunel, Sir Marc Isambard** (1769-1849), Eng. engineer, 85.
- Bruno, Giordano** (1548-1600), It. philosopher, spent many years in Fr. Ger. and Eng. disputing on philosophical theories, and on returning to It. was seized by the Inquisition and burnt.
- Bryant, William Cullen** (1794-1878), Amer. poet and journalist, his works include "Thanatopsis" (1817) and "Letters of a Traveller in Europe and America" for more than thirty years editor of the New York Evening Post.
- Bryce, James, 1st Viscount** (1838-1922), Brit. statesman, regius professor of civil law at Oxford (1870-93), Under-Secretary for Foreign Affairs (1896) Chancellor of the Duchy of Lancaster (1902) Pres. of the Board of Trade (1894-95), Brit. ambassador to U.S.A. (1907-13), author of "The Holy Roman Empire" (1844) and "The American Commonwealth" (1889).
- Bushanan, Robert Williams** (1841-1901), Scot. playwright, poet, and novelist, his works include "Undertones", "The Shadow of the Sword", "God and the Man" and "A Man's Shadow".
- Bushingham, George Villiers, 1st Duke of** (1592-1628), Eng. courtier favourite of James I., chief adviser of Charles I. in his disputes with Parl. commanded an unsuccessful expedition to the Isle of Re (1627), assassinated at Ports mouth.
- Bushland, Francis Trevelyan** (1828-80), Eng. naturalist appointed an inspector of Fisheries (1866), wrote "Curiosities of Natural History" (1867-72) and "Natural History of British Fishes" (1881).
- Buckle, Henry Thomas** (1821-62), Eng. historian, wrote "History of Civilization in England" (1857-61).
- Buffon, George Louis Leclerc, Comte de** (1707-88), Fr. naturalist, appointed director of the Jardin du Roi, Paris (1789), and in 1749 published the first volume of his monumental work, "L'Histoire Naturelle", member of the Academy (1753).
- Bull, Ole Bornemann** (1810-80), Norwegian violinist, disciple of Paganini.
- Buller, Sir Redvers, Harry** (1839-1906), Brit. soldier, saw service in the China war (1860) Sudan campaign (1884-86), and South African war (1899-1900).
- Bunsen, Robert Wilhelm** (1811-90), Ger. chemist, invented the Bunsen burner.
- Bunyan, John** (1628-88), Eng. puritan leader and author of "The Pilgrim's Progress", 1199.
- Burbage, Richard** (1567-1619), foremost actor of the Elizabethan stage.
- Burbank, Luther** (born 1849), Amer. naturalist; has experimented in the creation of plants, and produced new varieties of vegetables, fruits, and flowers.
- Burdett-Gusts, Angelina Georgina, Baroness** (1814-1906), Brit. philanthropist created a peeress (1871).
- Burke, Edmund** (1730-97), Brit. statesman and writer, Irishman by birth, founded "The Annual Register" (1759), returned to Parl. for Wendover (1765), his speeches on Amer. affairs created a great sensation, and his position in political life was raised still higher by his pamphlets on current questions, produced a plan of economical reform (1780), became paymaster-general, played a leading part in the impeachment of Warren Hastings, retired from Parl. life (1794).
- Burke, Robert** (1820-61), explorer of Australia, 1273.
- Burnaby, William Cecil, Lord** (1820-98), Eng. minister of State, became Elizabeth's chief Sec. of State, in this capacity he did more than any other man to promote that feeling of national unity which is distinctive of the Elizabethan period.
- Burnaby, Frederick Gustavus** (1842-1885), Brit. soldier, known from his ride to Khiva on horseback (1875), fought at El Teb killed at Abu Klea.
- Burnand, Sir Francis Cowley** (1836-1917), Brit. journalist and dramatist editor of Punch (1880-1906), his plays include "Black-eyed Susan", "Betty", "The Colonel", and "Artful Cards".
- Burne-Jones, Sir Edward Coley, Bart.** (1833-98), Brit. artist, friend of Rossetti and William Morris, had great influence on decorative design, painted steeped in romance ("Love Among the Ruins", "The Golden Stairs").
- Burnett, Frances Hodgson** (1840-1924), Ang. Amer. authoress, her most famous work is "Little Lord Fauntleroy" (1886).
- Burney, Fanny (Frances)** (1752-1840), Eng. novelist also known by marriage name, Miss D. Arblay, "Evelina" which appeared anonymously in 1779, won her fame, and the admiration and friendship of Dr. Johnson, "Cecilia", "Camilla", "The Wanderer", "The Memoirs" of her father, and her Diary are the chief of her other works.
- Burns, George**, pioneer of steam navigation 1269, 1281.
- Burns, Robert** (1759-96) Scot. poet, son of an Ayrshire farmer with his brothers worked on a farm his first volume of poems (1786) attracted much attention, Burns being invited to Kilmuir and made much of by literary society at this time he was on the point of emigrating to Jamaica, in 1788 he married Jean Armour, and in 1789 became an excise officer, as well as a farmer in Dumfriesshire, in 1791 he removed to Dumfries, where he continued his poet in the excise and wrote poems for the Edinburgh publishers.
- Burton, Sir Richard Francis** (1821-90), Brit. traveller and author, 177.
- Burton, Robert** (1876-1940), Eng. divine and author wrote "The Anatomy of Melancholy" (1921).
- Butler, Elizabeth Southdown, Lady** (born 1860), Brit. artist, her pictures include "Mining" (1878), "The Roll Call" (1874) "The Dawn at Waterloo" (1895).
- Butler, Joseph** (1692-1752), Eng. divine, author of "The Analogy of Religion Natural and Revealed, to the Constitution and Course of Nature" (1736) appointed Bishop of Bristol (1738) Dean of St. Paul's (1749), Bishop of Durham (1750).
- Butler, Samuel** (1812-90), Eng. poet, most famous work "Rudibras" (1863-78).
- Buxton, Sir Thomas Fowell, Bart.** (1788-1845), Brit. philanthropist successor to Wetherforce in his efforts to secure the emancipation of the slaves.
- Byng, John** (1704-37), Brit. admiral court-martialled and shot for failure to relieve Minorca and to engage and destroy a Fr. squadron off Port Mahon.
- Byng, Julian Hedworth George, 1st Baron** (born 1862), Brit. general, fought in the Sudan (1884), South African war (1899-1902), and in Belgium, Gallipoli, and Fr. in the World War (1914-18).
- Byron, George Noel Gordon, 6th Baron** (1788-1824), Brit. poet, 325.
- Cabot, John** (1450?-98?), It. navigator settled in Lark (circa 1484), obtained letters patent from Henry VII to discover unknown lands (1496), sailed with his sons (1497) and reached N. Amer. in following year landed in Newfoundland and sighted Newfoundland and Nova Scotia.
- Cabot, Sebastian** (1474-1557), It. navigator; accompanied his father, John Cabot (1497), in the service of Sp. (1512-47), except for a visit to Eng. (1512-19), led expedition to Brazil (1528), and visited the river La Plata, on returning to Eng. became governor of the Company of Merchant Adventurers trading with Russia.
- Cadbury, George** (1838-1922), Eng. business man and philanthropist, 308.
- Cade, Jack** (died 1450), Eng. rebel headed rebellion against Lancastrian misgovernment, defeated royal forces at Battonk (1450), marched on London, but his followers were soon dispersed, and he himself mortally wounded.
- Cadogan, Gwent Laidy** (born 1850), It. soldier commander-in-chief of It. army (1915-17), superseded after battle of Caporetto (1917).
- Cadman** (died circa 675), Anglo-Saxon poet, originally a cow-herd, entered the monastery of Whitby, paraphrased in verse the Old and New Testaments.
- Cassar, Gaius Julius** (102-44 B.C.), Rom. soldier and statesman 1298, 308.
- Caillanz, Joseph Pierre** (born 1863), Fr. politician, several times Minister of Finance, before becoming Prime Minister in 1911 imprisoned for more than two years for having relations with the enemy during the World War, again became Minister of Finance in 1925.
- Caine, Sir Hall** (born 1853), Eng. novelist and dramatist, 1451.
- Calderon de la Barca Pedro** (1600-81), Sp. dramatist while serving as a soldier wrote the "Siege of Breda", became the leading poet in Sp., took holy orders (1651), and thereafter wrote little else than sacred dramas.
- Caligula** (12-41), Rom. emperor, son of Germanicus and Agrippina, succeeded his patron Tiberius (37), his madness, cruelty, and extravagance led to his murder by the Praetorian guards.
- Calvin, John** (1509-64), Ir. theologian while studying law learnt Gk., and on reading the New Testament became a Protestant wrote a commentary on Amos's "De Clementia" but, forced by persecution to leave Fr. took refuge in Basel, in 1536 appeared his influential of the Christian Religion with Farel he attempted to establish a kind of theocracy at Geneva, but they were expelled (1538) and retired to Zurich, at Strasburg Calvin became pastor to the Fr. refugees and married Idelette de Bure invited back to Geneva (1541), the theocratic gov. was resumed, and here he laboured till his death.
- Cameron William** (1551-1628) Eng. antiquarian, headmaster of Westminster (1593-97) Britannia or a Chorographical Description of Lowland Scotland, and Ireland" (1586), established his fame.
- Camillus, Marcus Furius** (died 285 B.C.) Rom. general, said to have been five times dictator, captured Veii and Falerii.
- Camoes or Camoes, Luis Vaz de** (1524?-80), Portuguese poet, after banishment (1546) and many adventures he returned to Port (1569), and published "The Lusads".
- Campbell, Thomas** (1777-1844), Scot. poet, wrote "The Pleasures of Hope" (1799), "The Battle of Hohenlinden" (1801), "Gertrude of Wyoming" (1809), etc.
- Campbell-Bannerman, Sir Henry** (1836-1908), Brit. statesman, secretary for War (1896) became leader of the Liberal party (1899), Prime Minister (1905-08).
- Canning, Charles John, Earl** (1812-62), Brit. statesman, Postmaster-General (1862-65), Governor-General of India (1865-68).
- Canning, George** (1770-1827), Brit. statesman, entered Parl. (1794) as a supporter of Pitt, Foreign Secretary (1807-9) and (1822-27), Prime Minister (1827).
- Canova, Antonio** (1757-1822), It. sculptor, began life as a stonemason, among his best known works are "Hercules and Laches", "Theseus and the Minotaur", "Psyche".
- Canute, or Cnut** (994-1085), King of Danes and Norwegians and ruler of Eng. succeeded his father Sweyn, as King of

Denmark (1014) invaded Eng but was opposed by Edmund Ironsides with whom he divided the kingdom till the death of that prince (1016) left Canute sole ruler

Caravaggio, Michelangelo Amegio de (1569-1609) It painter formed the style of chiaroscuro imitated by many subsequent painters his masterpiece the Entombment of Christ is at the Vatican died in poverty

Carlyle, Jane Welsh (1801-66) witty and brilliant wife of Thomas Carlyle 1283

Carlyle, Thomas (1795-1881) Scot essayist and historian 1283

Carson, Sylvia (1843-1916) pen name of Elizabeth queen of Charles first King of Romania 1247

Carson, Andrew (1835-1913) Scot Amer ironmaster and philanthropist 101

Carson, Lazare Nicolas Marguerite (1759-1823) Ir statesman member of the committee of Public Safety proscribed (1793) recd by Napoleon I who made him minister of war (1799)

Carson, James Franciscus Sack (1837-94) pres of the Ir republic (1887-94)

Carson, Lewis (1842-98) pseudonym of Rev Charles Lutwidge Dodgson Brit humorist and author of Alice in Wonderland (1865) Through the Looking Glass (1872) The Hunting of the Snark (1876) Rhyme and Reason (1883)

Carson, Edward, Baron (born 1864) Ir Unionist leader head of Ulster rebellion against Home Rule (1914-15) Attorney General (1914) first lord of the Admiralty (1916-17) member of war cabinet (1917-18)

Carster Jacques (1494-1557) Fr navigator discovered the estuary of the St Lawrence and sailed up the river as far as the site of Montreal

Cartwright Edmund (1743-1823) Brit inventor of power loom 1265

Caruso, Enrico (1873-1921) It operatic singer 649

Casabianca, Louis (1755-98) Fr naval officer commanded Napoleon's flagship which caught fire at battle of the Nile his 10 year-old son (immortalized in Mrs Hemans poem) refused to leave his father both were killed when ship blew up

Casanova, Giovanni Jacopo (1725-98) Venetian adventurer and writer best known for Memoirs of the amorous life he led in most of the European capitals

Cassment, Roger (1864-1916) Sinn Féin leader knighted for special services (1912) owing to his anti Brit activities in Ger and in Ir was degraded from rank and executed (Aug 1, 1916)

Casson, William (1892-1766) Eng type founder invented a type face which is still much used

Cassell, John (1817-65) Eng publisher and temperance reformer founder of Cassell and Co Ltd son of a Min chster innkeeper first interested him self in temperance while working as a carpenter in his native town after holding an appointment as travelling temperance lecturer he became a tea and coffee merchant in London started a paper called the *Temperance Times* thus laying the foundation of the great publishing business at La Belle Sauvage Indgate Hill

Cassini, Giovanni Domenico (1629-1712) It astronomer appointed professor of astronomy at Bologna (1660) director of the Royal Observatory Paris (1690) discovered the satellites of Saturn Rhea Dione and Tethys

Cassius, Gaius Longinus (died 42 B.C.) Rom general chief conspirator against Julius Caesar joined Brutus in command of the republican army after being defeated by Antony at Philippi he commanded a servant to kill him

Castaillon, Edouard de (born 1861) Ir general commander of Ir 2nd army (Aug-Sept 1914) organized emergency defence of Verdun (1916) held commands on a front (1917-18)

Cassie, Egerton (born 1858) Eng writer entered the army and made an exhaustive study of fencing joined staff of *Naturalist Review* (1885) (Bath Comedy Secret Orchard)

Cathborough, Robert Stewart, Viscount (2nd Marquis of Londonderry) (1769-1822) Brit statesman Sec for Ir (1798-1800) Sec for War (1806-8, 1807-9) fought duel with Canning which led to his retirement Foreign Sec (1812-22) his unpopularity so preyed upon his mind that he committed suicide

Catherine I (1684?-1727) Empress of Rus wife and successor of Peter the Great

Catherine II, the Great (1729-96) Empress of Rus 1231

Catherine of Aragon (1485-1536) Queen of Eng daughter of Ferdinand and Isabella of Sp married Arthur Prince of Wales (1501) and subsequently his brother afterwards Henry VIII she was divorced and in 1533 her marriage was pronounced invalid by Cranmer she spent the rest of her life at Kimbolton

Catherine of Braganza (1638-1705) Queen of Eng daughter of John IV of Port in 1662 was married to Charles II of Eng bringing Tangier and Bombay as part of her dowry returned to Port in 1682 and acted as regent for her brother Pedro

Catiline, Lucius Sergius Catilina (108-62 B.C.) Rom conspirator after failing to obtain the consulship in 63 organized a conspiracy which was denounced by Cicero he fled and joined forces with a revolutionary army and was killed in battle

Cato, Marcus Porcius (234-149 B.C.) (the Elder) Rom statesman and orator called Cato the censor became consul in 165 in discharging his duties proved himself to be a harsh moralist though a keen patriot in 184 was elected censor

Cato, Marcus Porcius (95-46 B.C.) (the Younger) Rom statesman and stoic philosopher sided with Pompey against Caesar after battle of Pharsalus retired to Utica finding that the inhabitants would not oppose Caesar's forces he committed suicide

Cattaneo, George (1800-88) Eng water colour painter illustrated many well known works including Scott's Waverley Novels and Dickens's Barnaby Rudge (The Diet of Spices)

Catullus, Gaius Valerius (c. 87-c. 54 B.C.) greatest Rom lyric poet a master of satire he directed much of his invective against Caesar

Cavan, Frederick, 10th Earl of (born 1865) Brit soldier commanded Guards div in World War and later the 14th Army Corps Chief of Imperial Military Staff (1922)

Cave, George, 1st Viscount (born 1865) Brit lawyer and politician entered parl (1906) Solicitor General (1915) Home Sec (1916-19) a Lord of Appeal (1919-22) appointed Lord Chancellor in 1922 and again in 1924

Cavell, Edith (1865-1915) Brit nurse attached to hospital in Brussels shot by Ger during World War for helping refugees to escape

Cavendish, Frederick Charles, Lord (1836-82) Brit politician shortly after appointment as Chief Secretary for Ire he was murdered in Phoenix Park Dublin

Cavendish, Henry (1731-1810) Brit natural philosopher independently of Watkin discovered composition of water (1781) gained most renown through determining the weight of the earth

Cavour, Camille Benso, Count di (1810-61) It statesman began life as officer in Sardinian army was minister of agriculture and commerce (1860-62) prime minister (1862) did much to make It a united kingdom under Victor Emmanuel

Caxton, William (1422?-91) first Eng printer 594

Cayley, Sir George (1773-1857) inventor of an aeroplane 338

Cecil, Lord Hugh Richard Heathcote (born 1869) Brit politician and soldier brother of Robert in House of Commons (1895-1906) mem for Oxford Univ since 1910 Lieut Royal Air Force in World War

Cecil, Robert, Viscount (born 1864) Brit

statesman, son of Marquis of Salisbury, M.P. for E. Marylebone (1896-1901), Minister of Blockade (1916-18) represented S. Africa at first meeting of Assembly of the League of Nations at Geneva (1920) received peerage (1923)

Cecil, William, Lord Hurlingham See Hurlingham. **Celestine I (died 432)** succeeded Boniface as Pope (432) noted for his condemnation of the teachings of Nestorius and sending St Patrick to Ire

Celestino V (Pietro di Morrone) (1215-96) Pope (1294) previously an anchorite who formed an order called the Celestines

Celher, Alfred (1844-91) Brit composer and conductor his most popular light opera was *Dorothy* produced in 1886

Celina, Benvenuto (1500-71) It goldsmith and sculptor 128

Cerdas (died 534) Saxon chieftain founder of W. Saxon kingdom

Cervantes Saavedra, Miguel de (1547-1616) greatest of Sp writers son of an apothecary surgeon had a distinguished army career was captured by Barbary pirates and spent five years in slavery after being ransomed he settled at Seville and devoted his time mainly to writing dramas in 1605 the first part of Don Quixote appeared the second following ten years later *La Galatea* (1585) Novelas Exemplares (1613) and *Viage del Parnaso* (1614)

Cetewayo (died 1884) King of Zululand revolted against his father King Panda in 1856 and took possession of the throne becoming tyrannical the British declared war against him (1879) Cetewayo routed at Ulundi was captured and brought to Eng in 1883 his kingship was restored but he was forced to seek British protection he died at Ikwwe

Cézanne, Paul (1839-1906) Fr portrait, landscape and still life painter sought to combine impressionist colour and light with classic design and form

Chadwick, Sir Edwin (1800-90) Brit social reformer interested in child welfare pioneer of public sanitary reform

Challin, Paul Belloni de (1835-1903) notable Ir explorer and writer made important discoveries in anthropology and zoology

Chalapsin Theodore (born 1873) famous Russ bass singer of peasant stock he was for a period a shoemaker appeared at Drury Lane London (1918 and 1914) visited Eng again in 1925

Chalmers, Thomas (1780-1847) Scot divine and political economist played important part in establishing the Free Church of Scot (1) *Visitudes of Christianity* (Commercial Discourses Political Economy)

Chamberlain, Arthur Neville (born 1869) Brit politician younger son of Joseph Chamberlain entered parl (1918) appointed Director General of National Service (1918-17) became Postmaster General in 1924 Minister of Health in 1923 and again in 1924-25

Chamberlain, Joseph (1836-1914) Brit Liberal Unionist statesman 636

Chamberlain, Joseph Austin (born 1863) Brit statesman son of Joseph Chamberlain entered parl (1892) Civil Lord of Admiralty (1898-1900) Financial Sec to Treasury (1900-2) Postmaster General (1902-3) Chancellor of Exchequer (1905-6 and 1919-21) Sec of State for India (1916-17) Foreign Sec (1924) 540

Chambers, Ephraim (1680?-1740) Eng encyclopaedist first edition of his work appeared in 1728

Chambers, Robert (1803-71) Scot publisher and writer joint editor *Chambers's Journal* (*Vestiges of Creation*, *Book of Days*)

Chambers, William (1800-83) Scot publisher brother of Robert Chambers (s) partner in firm of W and R Chambers which published *Chambers's Encyclopaedia* *Chambers's Journal* etc

Chambers, Sir William (1728-96) Brit architect, born at Stockholm of Scottish parents designed pagoda in Kew Gardens Somerset House and other madhouses

CHAMBORD

Chambord, Henri, Comte de (1820-83), Fr prince, son of the Duc du Berry and grandson of Charles X, on fall of Napoleon III unsuccessfully attempted to gain Fr throne

Champlain, Samuel de (1567-1635), Fr explorer who founded Quebec, 1605

Chancellor or Chancellor (died 1556), Brit navigator, in 1553 joined Sir Hugh Willoughby's expedition to discover north-east passage to India, made his way to the White Sea, and visited Moscow, returning from second Moscow voyage was wrecked off Scotland

Channing, William Ellery (1780-1842), Amer Unitarian preacher, reformer, and writer; strongly opposed slavery, but disapproved of abolitionists' violence

Chantry, Sir Francis Legatt (1781-1841), Eng sculptor, son of a carpenter, he became eminent as a sculptor of busts, and was made an R.A. (1818), the administration of his bequest was the subject of much criticism the bust of Sir Walter Scott, and "The Sleeping Children" group in Lichfield Cath are notable examples of his work

Chaplin, Charles Spencer (born 1888), Brit cinema actor

Chaplin, Henry, 1st Viscount (1841-1928), Brit politician pres of Local Government Board 1895-1900

Chappell, William (1809-88), Brit music writer and publisher

Charcot, Jean Baptiste (born 1847), Fr Antarctic explorer, commander expeditions in 1909-10 and 1908-10 mapped Graham Land, Alexander Land, etc., Charcot Land was named after him

Charlemagne (742-814), King of the Franks and Holy Rom emperor, he attacked the Saxons, whom he subdued after a war of thirty years, captured Pavia, and assumed crown of Lombardy himself (774) in 778 he marched against the Saracens in Sp, and drove them beyond the Ebro, but on his return home his rear guard was defeated at Roncesvalles and his follower, Roland slain, on Christmas Day (800), was crowned emperor of the West in Rome by Leo III and refounded Holy Rom Empire, he much devoted himself to advancement of learning and Christian religion

Charles I (1600-49) King of Gt Brit and Ire succeeded his father James I (1625) and was almost immediately involved in disputes with parl, after reluctantly granting the Petition of Right (1628) he ruled for eleven years without a parl, under influence of Earl of Strafford and Archbishop Laud he resorted to various unconstitutional methods of filling his exchequer, such as exaction of ship money, and caused a rebellion in Scot by attempting to force episcopacy upon the people in 1640 the Long Parl met, Strafford was impeached and executed, and Laud imprisoned after his failure to arrest the five members, Charles raised his standard at Nottingham, and the Civil War began the parl victories at Marston Moor (1644), Naseby (1645), and elsewhere, induced Charles to surrender, he was executed at Whitehall

Charles II (1630-85), King of Gt Brit and Ire, son of the preceding after Naseby joined the queen at Paris, in 1650 landed in Scot and was crowned at Scone (1651), his defeat at Worcester necessitated his return to the Continent, where he led a wandering life till recalled by parl (1660), hoping to render himself absolute, from 1681 he ruled without a parl

Charles II (823-77), Holy Rom emperor, King of the West Franks, called "the Bald", son of Louis the Pious, on the death of his father joined his step-brother, Louis, against their eldest brother, Lothaire, who was conquered at Fontenay (841), Charles became king of France (843), and Emperor of the West (875)

Charles III (832-88), Holy Rom emperor, King of the West Franks, younger son of Louis the German elected emperor (881), accepted the throne of France (884), deposed (887)

Charles IV (1316-78), Holy Rom emperor,

King of Bohemia and Germany, son of John, King of Bohemia elected emperor (1347), and annexed Brandenburg and Silesia to Bohemia, in 1358 issued the "golden bull" to regulate the election of the Ger king

Charles V (1500-58), Holy Rom emperor and King of Sp (as Charles I), son of Philip of Burgundy inherited the Netherlands on the death of his father (1506), in 1519 was elected emperor took Francis I of France prisoner at Pavia (1525), and as the Pope sided with Francis after his liberation, Charles attacked and took Rome, in 1556 he resigned crown of Sp and Netherlands to his son Philip, and in 1556 that of Ger to his brother Ferdinand, the rest of his life was spent in a monastery

Charles VI (1685-1740), Holy Rom emperor, second son of Leopold I engaged with the assistance of Eng, Holland, and Port, in a struggle with Philip V for the throne of Sp, but by the treaty of Rastadt (1714) renounced his claim, succeeded to the dominions of the house of Austria and was elected emperor (1711), after fighting the Turks he ceded Serbia and Wallachia at the peace of Belgrade (1739)

Charles VII (1697-1745), Holy Rom emperor, son of Maximilian, Elector of Bavaria, claimed the imperial throne, as a descendant of Ferdinand I, on the death of Charles VI in opposition to his daughter, Maria Theresa through the assistance of France and Prussia he was crowned at Frankfurt (1742), but a red creek of Prus was won over by Maria Theresa, and the Fr defeated at Dettingen by George II of Eng (1743) Thus the struggle was decided in favour of Maria Theresa

Charles I of France, See Charlemagne.

Charles III (878-928), king of Fr known as "the Simple", son of Louis the Stammerer the throne was successively occupied by Charles the Fat and Louis, Count of Paris but on the death of the latter (898), Charles became king until deposed in 922

Charles IV (1294-1328), King of Fr and Navarre known as "the Fair" succeeded his brother, Philip the Tall (1322)

Charles V (1337-80), King of Fr, called "the Wise", succeeded his father John (1364) he regained most of the territory lost to Eng by his predecessors, he founded the Bibliothèque Royale in Paris, and the Bastille

Charles VI (1388-1422), King of Fr succeeded his father Charles V (1380) and was led by his uncle the Duke of Burgundy, against Philip van Artevelde, leader of the Flemish insurgents whom he defeated at Rosbecque (1382) in 1388 took the gov into his own hands but shortly afterwards lost his reason

Charles VII (1403-61), King of Fr assumed the title of king on the death of his father Charles VI (1422) but remained inactive till aroused by Joan of Arc was crowned at Rheims (1429) pursued his career of victory till in 1456 nothing but Calais was left to the king, 1460, 1461, 1468, 1483

Charles VIII (1470-98), King of Fr son of Louis XI, succeeded (1483) under the guardianship of his sister, Anne of Beaujeu, a war with Germany, Eng, and Sp, was concluded by the treaty of Senlis (1493), in 1495 Charles seized Naples, to which he had claim, but though he was victorious at Fornovo (1495), he lost Naples, and never reconquered it

Charles IX (1550-74), King of Fr succeeded his brother Francis II (1560) the government being conducted by his mother, Catherine de' Medici, the kingdom was desolated by a religious war a peace made in 1570 was followed in 1572 by the massacre of St Bartholomew

Charles X (1757-1836), King of Fr, grandson of Louis XV, on abdication of Napoleon I (1814) was appointed regent for his brother, Louis XVIII, on whose death (1824) he ascended the throne, but after the revolution of July, 1830, abdicated

Charles (Carol) I (1839-1914), King of Rumania, elected prince (1866), crowned

CHARLES

first king (1881), married Elizabeth of Wied (Carmen Sylva"), 1146, 1146, 1150, 1151, 1152

Charles I of Spain, See Charles V, Holy Rom emperor

Charles II (1661-1700), King of Sp son of Philip IV, succeeded (1665), under regency of his mother, Don John of Austria gained control and protected the interests of the country, after his death, Port secured her independence, and Louis XIV endeavoured to annex the Low Countries, and to secure a Bourbon successor to the throne of Sp but was prevented by the interposition of Eng, Ger, and Holland, the wars which followed lasted till the peace of Ryswick (1697)

Charles III (1716-88), King of Sp younger son of Philip V, ascended the throne (1763), Bourbon league involved him in a war with Eng during which he lost Manila and other colonies joined with Fr in aiding Amer colonies, at close of war Florida and Minorca were ceded to Sp

Charles IV (1748-1819) King of Sp, son of the preceding, whom he succeeded (1788), allied himself with Fr (1795), his fleet was destroyed by Nelson at Trafalgar (1805) forced to abdicate in favour of Napoleon I (1808)

Charles VIII (1489-70), King of Sweden, drove the deposed king Eric from the Isle of Gothland and in 1499 was elected King of Norway but was obliged to yield the throne to his rival, Christian, King of Denmark

Charles IX (1550-1611), King of Sweden, was occupied in constant wars with Denmark, Poland, and Russia

Charles X (1622-60), King of Sweden cousin to Queen Christina, who abdicated in his favour (1654) carried on successful wars against Poland and Denmark

Charles XI (1655-97) King of Sweden succeeded his father Charles X (1660) and did much to put his country's affairs in order

Charles XII (1682-1718), King of Sweden son of Charles XI, whom he succeeded (1697) in 1700 Denmark, Poland, and Rus allied themselves against him but he defeated the Danish fleet routed the Rus at Narva and then proceeded against Augustus, King of Poland who was defeated and deposed in 1706 he undertook a campaign into Rus but was defeated by Peter the Great at Poltava (1709) he took refuge with the Sultan of Turkey, and returned to Sweden in 1714 in 1718 invaded Norway, but was killed at the siege of Fredrikshald, 1718, 1777

Charles XIII (1748-1818) King of Sweden and Norway, proclaimed king (1809), upon the pro-crispation of his nephew Gustavus IV Norway was annexed to Sweden (1814)

Charles XIV (1763-1844) King of Sweden and Norway Jean Baptiste Jules Bernadotte, son of a lawyer of Pau entered Fr army (1780), winning favour with Bonaparte was made minister of war (1799) marshal of Li (1804), elected Crown Prince of Sweden (1810), and as regent had no small share in the overthrow of Napoleon, in 1818 succeeded Charles XIII

Charles XV (1826-72), King of Sweden, succeeded to throne (1859) memorable for his parl reforms, painter and author of some merit

Charles (1771-1847), Austrian soldier and archduke, third son of emperor Leo II, conducted campaigns against Fr republic and Napoleon, appointed commander in chief of the Austrian armies (1798) in 1809 he checked the Fr at Aspern-Lessing, but Napoleon crossed the Danube and defeated him at Wagram

Charles Edward Louis Philip Casimir Stuart (1720-88), the "Young Pretender," grandson of James II of Eng, and son of James, the "Old Pretender", in 1745 he made an attempt to gain the throne in his father's name, landed in Inverness-shire, and, after a victory at Prestonpans, marched into Eng as far as Derby but was forced to retrace his steps

CHARLES

was again victorious at Falkirk (1746) but defeated at Culloden in the same year and after months of privation and disguise escaped to Fr. compelled to leave that country by the terms of the peace of Aix la Chapelle (1748) he spent the rest of his life chiefly in It.

Charles, Jacques A C (1746-1823) Fr physicist inventor of first hydrogen balloon 236, 267

Charles Martel (689 ? 741) Frankish ruler defeated the Saracens at Tours (732) grandfather of Charlemagne

Charles the Bold (1433-77) Duke of Burgundy succeeded in 1467 for most of his reign at enmity with Louis XI of Fr unsuccessful in his expedition against the Swiss he was slain whilst endeavouring to regain the town of Nancy

Charles the Good (1084 ?-1127) Count of Flanders son of Canute IV of Denmark succeeded Baldwin VII (1119)

Charlotte (born 1896) Grand Duchess of Luxembourg succeeded to throne on abdication of her elder sister in 1919

Chateaubriand, François René Vicomte de (1768-1848) Fr writer and politician was in Paris during early part of the Revolution in 1791 sailed to Amer returned the following year and took refuge in London where he remained till 1800 under the Bourbon dynasty he was ambassador to many countries and in 1824 was foreign minister refused to take the oath to Louis Philippe and was imprisoned in 1831. exquisite prose writer his chief works are *Atala* and *The Genius of Christianity*

Chatham, William Pitt, 1st Earl of (1708-78) Brit statesman became member of parliament in 1735 attaching himself to the opposition group under the Prince of Wales supported the ministries of Pelham and Newcastle was made privy councillor of the forces a post which he lost through his anti Hanoverian speeches as Secretary of State in 1756 and again in 1757 under Newcastle he carried on war against Fr with great success but on the accession of George III he was forced to resign in 1760 was created Earl of Chatham and continued to urge a policy of conciliation towards Amer while thus engaged he sank down in a fit of apoplexy from which he never recovered

Chatterton, Thomas (1752-70) Eng poet and literary forger early displayed taste for antiquities and poetry which he indulged by fabricating literary forgeries of which the *Rowley Poems* are most celebrated these he pretended to have discovered in some chests in St Mary Redcliffe at Bristol went to London where reduced to starvation he died by his own hand

Chaucer, Geoffrey (1340 ? 1400) Eng poet the son of a London vintner he became in 1357 a page in the household of the Duchess of Clarence served in the army in 1372 was sent on a commercial mission to It and after his return held a number of public posts which secured him a competence till his death he was also occasionally sent abroad on royal service he wrote *Troilus and Criseyde* the *Parliament of Fowls* the *House of Fame* the *Legend of Good Women* and numerous other poems but his great work is the *Canterbury Tales*

Chalmers, Frederick John Napier Thesiger, 1st Viscount (born 1868) Brit politician Gov of Queensland (1905-9) Gov of N S Wales (1909-13) Viceroy of India (1916-21) he became First Lord of the Admiralty in the first Labour govt (1924)

Cherubini, Mame Luigi (1760-1842) It composer after visiting London in 1785 settled in Paris and there wrote many operas *Les Deux Journées* (1800) being the most famous he published a treatise on counterpoint

Chetwold, Philip Dormer Stanhope, 4th Earl of (1804-1873) Brit statesman, author and patron of literature educated at Cambridge, he succeeded to the title in 1826 and attached himself to the Prince of Wales in 1828 he went as

ambassador to The Hague and on his return opposed Walpole but failed to obtain office on his fall in 1745 went to Ire as lord lieutenant and in 1746 was made Sec of State but ill health soon necessitated his retirement is now best remembered by his *Letters* to his son

Chatterton, Gilbert Keith (born 1874) Eng novelist critic and brilliant artist studied art and early exhibited precocity with pen and pencil his first publication was *The Wild Knight* (1900) a volume of poems (*The Man who was Thursday* Heretics Orthodoxy)

Chicherin, Georgiy Vassilievich, Rus politician once was in the diplomatic corps of the Tsar went over to the Socialists and was appointed minister for Foreign Affairs in the Soviet govt

Chillingworth, William (1602-44) Eng divine he was persuaded to abjure Protestantism and join the College at Douai induced by Laud to return he again embraced his former faith and published the *Religion of Protestants* (1637) aided with the king in the Civil War was taken prisoner by the parliamentarians and died in captivity at Rochester

Chippendale, Thomas (died 1770) Eng cabinet maker he made beautiful chairs, cabinets and bookcases his best work being produced between 1735 and 1760

Choate, Joseph Hodges (1832-1917) Amer diplomat and lawyer leading advocate of Amer bar ambassador to Gt Brit (1899-1905) delegate to Hague International Peace Conference (1907)

Chopin, Frédéric François (1810-49) Polish pianist and composer 781

Christian II (1481-1559) King of Denmark and Norway ascended the throne in 1513 conquered Sweden (1520) did much to improve the condition of his people was dethroned by the nobles in 1522 after nine years of exile he returned to Norway but was made prisoner and died in captivity

Christian IV (1577-1648) King of Denmark and Norway succeeded his father Frederick II (1588) founded the town of Christiansburg fitted out a magnificent fleet brought about many domestic reforms and established the commerce of his country taking part in the Thirty Years War he was defeated by Lilly in 1626 he also suffered some losses at the hands of the Swedes

Christian V (1646-99) King of Denmark and Norway weak but despotic ruler his war against Sweden was unsuccessful **Christian IX** (1818-1906) King of Denmark ascended the throne in 1863 as a result of his war with Prussia and Austria the duchies were lost (1864) his daughter Alexandra married the Prince of Wales who later became Edward VII

Christian X (born 1870) King of Denmark succeeded to throne in 1912 the tallest monarch in Europe

Christina (1626-89) Queen of Sweden succeeded her father Gustavus Adolphus (1632) abdicated in favour of her cousin Charles Gustavus (1654) died in poverty at Rome

Chrysostom, John, Saint (347 ?-407) The Golden mouthed a priest of Antioch most renowned of Gk fathers considered to have been the greatest orator in the anc Church writings include prayers homilies and letters

Churchill, Lord Randolph (1849-95) Brit statesman entered parliament in 1874 and in 1890 became leader of the knot of Conservatives known as the Fourth Party on the formation of Lord Salisbury's ministry in 1885 he became Sec of State for India and in 1886 accepted Chancellorship of the Exchequer within six months he resigned his position as protest against the government's expenditure

Churchill, Winston (born 1871) Amer novelist (*Richard Carvel* *The Crisis* *Coniston* *Mr Crewe's Career* *The Inside of the Cup*)

Churchill, Winston Spencer (born 1874) Brit politician and author son of Lord Randolph Churchill entered army (1895), attached to 5th forces during

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war with U S A and acted as war correspondent in various other campaigns entered parliament as Conservative in 1900 and returned as Liberal in 1906 First Lord of Admiralty (1911-15) Minister of Munitions (1915-18) appointed Sec for War (1918) Colonial Sec (1921-22) appointed Chancellor of the Exchequer in 1925 (London to Lady-smith via Pretoria) Lord Randolph Churchill *The World Crisis*

Collier, Colley (1871-1957) Eng actor and dramatist wrote *The Non juror* (1917) etc and in 1930 became poet laureate in 1940 appeared his *Apology* for his life

Comte, Marc-Antoine (1789-58) Rom statesman orator philosopher and author began his public career in 77 and became pleader in the law courts reputation established by speeches against Verres was made consul in 69 praetor in 66 and in 63 was elected consul his vigour in putting down the conspiracy of Catiline gained him title of father of his country in 52 went as gov to Cilicia he aided with Pompey against Caesar but submitted to the latter after Pharsalus and retiring to his Tusculan villa he spent his time in literary work his defence of Caesar's murderers and the Philippic orations directed against Mark Antony led to his proscription he was murdered by Antony's emissaries

Cid Campeador, Ruy Diaz (1040 ? 99) Sp national hero aided Sancho of Castile against his brother Alfonso King of Aragon but on the death of Sancho acknowledged Alfonso as king of Castile lost favour with Alfonso and retired from Court fighting against the Moors he won the reputation of the Champion of Christendom invaded Valencia (1088) and established it as a principality for himself ruled there till his death numerous dramas have been written round his name

Cimabue (1240-1302 ?) Florentine painter, whose real name was Giovanni Gualtieri the revival of painting in It after the Dark Ages is credited to him despite many attributions, probably little of his work remains

Cincinnatus, Lucius Quinctius (519 ?-459 ? B C) Rom dictator after being twice consul was summoned from the plough to take office as dictator subjugated the Aequians and returned to his farm was again dictator for a short time in his old age

Claron, La (1723-1808) Fr actress great interpreter of Voltaire's plays 1005

Clarendon, Edward Hyde, Earl of (1609-74) Eng statesman and historian as a member of the Long Parli opposed the arbitrary govt of Charles I but afterwards attached himself to his cause went to Jersey in 1646 and there began his *History of the Rebellion* followed Charles II in his wanderings he came Lord Chancellor returned with Charles in 1660 when he was made a peer seven years later he withdrew to the Continent to avoid impeachment and died at Rouen

Clarkson, Thomas (1760-1846) Eng philanthropist did much for the cause of anti-slavery especially in Brit W In dies

Claudius I (10 B C - A D 54) Rom emperor nephew of Tiberius succeeded Caligula in A D 40 became tyrannical through the influence of his wife Messalina afterwards married his niece Agrippina who poisoned him conquest of Brit began during his reign

Clay, Henry (1777-1852) Amer orator and statesman educated for the law in 1811 entered the House of Representatives of which he was seven times elected speaker supported the war with Gt Brit in 1812 and acted as plenipotentiary in the negotiations preceding the treaty of Ghent which ended the war (1814) spoke strongly in opposition to slavery

Clemenceau, Georges Benjamin Emile (born 1841) Fr statesman and journalist elected to National Assembly (1871) and Chamber of Deputies (1876)

as leader of Radical Republicans earned the nickname of "Tiger" by overthrowing ministries, rejected by electorate (1893), he pursued his journalistic career for nine years, elected to Fr Senate (1902) became successively Minister of Interior and Premier (1906). 2nd term of office as premier lasted from 1917-20, *picture*, 231.

Clement, Samuel Langhorne (1835-1910) See *Twin, Mark*.

Clement IV (died 1268) Pope, previously Archbishop of Narbonne, elected Pope (1268), assisted Charles of Anjou to conquer the kingdom of Naples.

Clement V (1264-1314), 1st Avignon pope, previously Archbishop of Bordeaux, was elected Pope in 1305, abolished Order of the Templars (1312).

Clement VII (*Claudio de' Medici*) (1475?-1534) Pope, elected in 1523 aided alternately with Francis I and Charles V, till the sacking of Rome by Countable de Bourbon (1527) compelled him to make terms with the latter, refused to divorce Henry VIII of Eng from Catharine of Aragon and so caused separation of the Church of Eng from Rome *picture*, 137.

Clement XIV (1705-74) Pope, elected in (1769), suppressed the order of Jesuits (1773).

Cleopatra (69-30 B.C.), Queen of Eg 307.

Clark-Maxwell, James (1831-79), Scot physicist, noted for his work in connexion with the kinetic theory of gases and the electro-magnetic theory of light.

Cleveland, Grover (1837-1908), 22nd pres of U.S.A., in 1882 elected gov of New York state, obtained presidency (1884) he was defeated by the republican candidate (1888), but re-elected (1892), his action in the Venezuela dispute caused friction with Eng, retired from public life (1897).

Clifford, John (1836-1923) Eng baptist minister and politician, 751.

Clive, Robert Baron Clive of Plassey (1725-74), founder of Brit Empire in India, 793.

Clough, Arthur Hugh (1819-61), Eng poet, travelled much on the Continent was an examiner under the Board of Education from 1853 until his death ("Tober-na-Vuolich" Say Not the Struggle Naught Availeth").

Clovis (465?-511), King of the Franks succeeded his father Childeric I (481) conquered large part of Fr, including Paris, where he made his capital, subdued the Alamanni and other tribes, through the efforts of Clotilda his wife, he was converted to Christianity in 496.

Clynes, John Robert (born 1869), Brit labour politician, as a boy worked in a cotton factory, succeeded Lord Rhondda as Food Controller (1913) when first Labour Govt was formed (1924) was appointed Lord Privy Seal and deputy leader of the House of Commons.

Cobbett, William (1762-1835), Brit politician and reformer, after some years spent on his father's farm he enlisted in the army (1784) saw service in Nova Scotia obtaining his discharge, went to Philadelphia and started journalistic career, returning to Eng (1800) he founded *The Weekly Political Register*, suffered imprisonment because of his writings in this journal, entered Parl (1832).

Cobden, Richard (1804-65), Brit. liberal statesman, 1039.

Cody, William Frederick ("Buffalo Bill") (1846-1917), Amer frontiersman and showman, served through Civil War as scout in U.S. army, undertaking to supply meat to workmen constructing Kansas-Pacific Rly, he killed over 4,800 buffaloes in one year, hence his nickname, after numerous expeditions against Indians he toured Amer and Europe with his Wild West show.

Coke, Sir Edward (1552-1634), Eng judge and politician, called to the Bar (1578), became Solicitor-General (1592), Attorney-General (1594), showed much harshness in prosecuting Essex, Raleigh, and others, Chief Justice of Common Pleas (1606), through opposing James I's claim to exercise prerogatives he was deprived of his appointments (1616), his last years were spent in

revising his literary works, including his "Coke Upon Littleton".

Colbert, Jean Baptiste (1619-83), Fr statesman, in 1661 Louis XIV gave him task of restoring the national finances, then in great disorder, this he accomplished, and under his guidance commerce began to prosper, created an efficient navy and founded Fr E India Company.

Coleridge, Hartley (1796-1848), Eng poet and essayist eldest son of Samuel Taylor Coleridge, passed his early years in the lake district, whence he went to Oxford, but left within a year, he then lived a wandering life, writing much poetry, chiefly beautiful sonnets and lyrics, and contributing essays to magazines.

Coleridge, Samuel Taylor (1772-1834), Eng poet, critic and philosopher, in 1796 started a short lived periodical, the *Biographian*, and published first volume of poems settled at Nether Stowey, where he wrote "The Ancient Mariner", and the first part of "Christabel", removed to Keswick (1800) but in 1804 was obliged by ill health to go abroad for a year he was sec to the governor of Malta, and on returning to Cumberland, started a periodical the *Friend*, this venture failing, he went to London, and wrote for the *Courier* and the *Morning Post*, in 1816 his practice of indulging in opium compelled him to put himself under the care of Dr Gillman of Highgate, with whom he spent the rest of his life ("Biographia Literaria" "Sublime Leaves").

Coleridge-Taylor, Samuel (1875-1912), Eng musical composer his best work was the setting to music of Longfellow's "Hawthorne".

Colet, John (1467?-1519), Eng theologian educated at Oxford travelled much abroad, was made Dean of St Paul's (1505), and founded St Paul's school (1512).

Coligny, Gaspard de (1519-72), Fr Huguenot leader became admiral of Fr (1552) and leader of Huguenots after Conde's death (1569) perished in massacre of St Bartholomew.

Colonna, Bartolommeo (1400-75) It soldier of fortune chiefly in service of Venice, his statue by Verrocchio in Venice, considered to be world's finest equestrian sculpture.

Collier, John (born 1850), Eng painter among his best-known paintings are "The Last Voyage of Henry Hudson", "The Laboratory", "The Cheat", "Sentence of Death".

Collings, James (1831-1920) Brit merchant and politician, entered parl (1880), demanded "three acres and a cow" for the farm labourer.

Collingwood, Cuthbert, Baron (1750-1810), Brit admiral, entered navy in 1781, co-operated with Nelson off the W Indies (1783-6), and so formed a lasting friendship with him took part in Lord Howe's victory (1794) on Nelson's death became commander in chief.

Collins, Michael (1890-1922), Ir statesman, Sinn Féin member of House of Commons (1918-22) appointed head of provisional govt of Ir Free State (Jan 1922), killed in ambush (Aug 1922).

Collins, Wilkie (1824-89), Eng novelist, called to the Bar (1851), becoming Dickens's close friend he contributed much of his finest work to *Household Words* and *All the Year Round* ("The Woman in White", "No Name", "The Moonstone").

Collins, William (1721-59) Eng poet, son of a hatter, spent his later life in London in poor circumstances died insane among the most beautiful poems he wrote are "The Pansies", "To Liberty", "To Evening".

Colt, Samuel (1814-62), Amer inventor of the revolver bearing his name.

Columbus, Christopher (1446?-1506), It navigator, 755.

Columbus, Diego (1480?-1526), eldest son of Christopher Columbus appointed gov of W Indies (1509), being accused of misgovernment returned to Sp (1515), where he remained till his death.

Columbus, Ferdinand (1488-1589), son of Christopher Columbus, whom he accompanied on his fourth voyage, wrote biography of his father.

Colvin, Sir Sydney (born 1845), Eng literary and art critic, Blade professor of fine art at Cambridge (1879-85) keeper of the prints and drawings in Brit Museum (1884-1912) (*Lives of Landor and Keats*, Edinburgh edition of R L Stevenson's works), 37.

Combes, Emile (1835-1921), Fr statesman, Premier (1902-8), enforced law suppressing religious orders and worked successfully to separate the Church and State.

Commanes, Philippe de (1445?-1511?), Fr historian, an adherent of Charles the Bold of Burgundy, transferred his services to Louis XI of Fr, who made him Lord of Argenton, his "Memoirs" form the most valuable history of the time.

Commodus, Lucius Aurelius (A.D. 161-192), Rom emperor succeeded his father Marcus Aurelius in 180, and abandoned himself to every form of cruelty and vice he was assassinated.

Compton, Edward (1854-1918), Eng actor, son of Henry Compton, first appeared at Drury Lane, London (1877) founded Compton Comedy Company (1881), Compton Mackenzie, the writer, is his son and Fay Compton, the actress, his daughter.

Compton, Henry (1805-77) Eng actor, father of Edward Compton, most successful as a Shakespearean clown.

Comte, Auguste (1798-1857), Fr philosopher founder of Positivism expelled from school for leading mutiny of pupils made acquaintance of Saint Simon the social thinker (1818) and was greatly influenced by his teaching, first work dealing with his philosophy appeared in (1830).

Conde, Louis I de Bourbon, Prince of (1530-69), Ir general and Huguenot leader together with Coligny, he led the Huguenots during the reign of Charles IX, was shot at battle of Jarnac.

Conde, Louis II de Bourbon, Prince of (1621-86), Fr general, called the Great Conde, routed bp at Rocroy (1643), at Dunkirk (1646) at Lens (1648) through giving offence to Maximin and the Queen he suffered a year's imprisonment (1650), when released he led the third Fronde rebellion, but was forced to flee to Flanders appointed commander in chief of the bp forces he waged war against his countrymen in Flanders a year after his defeat at Dunkirk in 1658, his rank in Fr was restored to him succeeded Turcotte as commander in chief of Fr forces (1675).

Condorcet, Marie Jean Caritat, Marquis de (1743-94), Fr mathematician, philosopher and revolutionist, while member of the Legislative Assembly laid the foundation of Fr educational system, took poison to escape the guillotine ("Lequiesce d'un Tableau Historique des Progrès de l'Esprit Humain").

Confucius (551-479 B.C.), Chinese philosopher, founder of Confucianism, after eight years spent in travelling through what is now the empire of China, preaching virtue and social order, returned to Lu where he was appointed to important state posts, effected moral and physical improvements, freeing the poor from oppression, and employing revenues to advance commerce, banished through intrigues, he retired to a remote valley, and devoted his last days to the completion and revision of his literary works.

Congreve, William (1670-1729), Eng dramatist, at 20 he went to London to study law, but soon began to write plays, ranks as one of the greatest comedy writers (*The Double Dealer*, 1693, *Love for Love*, 1695, *The Way of the World*, 1700).

Connaught, Arthur, Duke of (born 1850), Eng prince, 3rd son of Queen Victoria, entered army (1868), created Duke of Connaught and Strathearn (1874) saw service in Canada (1870), and Eg. (1882), in 1879 married Louise, daughter of Prince Frederick Charles of Prussia, field-marshal (1902), Inspector-General

(1904) Gov Gen of Canada (1911-18)

Connaught, Prince Arthur of (born 1883) Brit prince entered army (1901) married his cousin Alexandra Duchess of Fife (1913) served in Ir during World War returned from army (1919) apptd Gov Gen of S Africa (1920)

Conner, Ralph (born 1860) pen name of Charles W Gordon Canadian murder-ary and novelist worked among lumbermen and miners in Rocky Mts (The Sky Pilot (corporal (amerson))

Conrad II (890-1039) Holy Rom emperor founder of Franconian line

Conrad III (1093-1125) Holy Rom emperor founder of Hohenstaufen line leader of 2nd crusade (1148-49)

Conrad IV (1228-54) Holy Rom emperor son of Frederick II elected king (1237)

Conrad (originally Konarski) Joseph (1857-1924) Eng novelist born in Poland served in Brit merchant service (Youth The Nigger of the Narcissus, Chance Almayars Folly)

Constable, John (1777-1837) Eng landscape painter son of a Suffolk miller at first followed his father's trade but attracted the notice of Sir George Beaumont and in 1799 became a student at the Royal Acad called founder of modern school (The Valley Farm The Hay Wain The Cornfield Salisbury Cathedral)

Constantine I Rom emperor called the Great (280-337) was in Brit at the time Constantine his father died and was proclaimed emperor by the army there after defeating Maxentius in 312 was acknowledged as emperor of the West (Liquor of Immortality) the last was broken, out between the two princes Licinius was slain in 324 and Constantine became emperor of the East also in 330 removed seat of govt to Byzantium which he renamed Constantinople awarded the first general council of Nicaea (325)

Constantine VIII (1024-1028) last Byzantine emperor

Constantine I (1068-1025) king of Greece succeeded his father George I (1013) abdicated (1022)

Cook, Frederick A (born 1800) Amer Arctic explorer accompanied Lewis expedition as surgeon (1831-32) ascended Mt McKinley (1906) claimed discovery of North Pole (1909)

Cook, Captain James (1728-73) Eng explorer and navigator 848

Cooke, Sir William Fortheargill (1806-70) Eng electrical engineer constructed first Eng telegraph line

Coolidge, Calvin (born 1871) 30th pres. of U.S.A. 1925

Cooper, James Fenimore (1786-1851) Amer novelist after six years service in U.S. navy retired (1811) famous for thrilling Indian and sea stories (The Spy The Pilot The Last of the Mohicans)

Cooper, Peter (1791-1863) Amer mfr and philanthropist built first locomotive made in Amer the Tom Thumb (1830)

Copernicus, Nicolaus (1473-1543) Polish astronomer 153

Copeland, Ernest Constant (1841-1909) most famous of modern Ir actors his greatest role (Yrano de Bergerac)

Corday, Charlotte (1768-93) Ir revolutionary heroine 886

Cornell, Mary (1864-1924) Brit novelist wrote many melodramatic romances with ethical or religious undertone (Romance of Two Worlds The Borrowers of Satan The Master Christian)

Coriolanus, Gaius Marcius (6th cent B.C.) Rom patrician who banished from Rome led an army against the city but was induced by his wife and mother to forgo his vengeance and refrain from attacking it bears of Shakespeare's Coriolanus

Cornwall, Pierre (1806-84), Fr dramatist 1503

Cornwall, Peter von (1784-1867) Ger painter founded Munich school of art and revived mural painting (Last Judgment)

Cornwallis, Charles, Marquis (1738-1805) Brit general entered army (1758) his surrender at Yorktown Va (1781) close Amer War of Independence Gov Gen of India (1786-1805)

Cornwallis, Sir William (1744-1819) Brit admiral entered navy (1755) hero of many sea fights with Amer and Ir

Cornwall, John Travers (1809-1918) heroic boy sailor who though mortally wounded on his ship *Caster* during battle of Jutland (May 31 1916) remained gallantly at his post posthumously awarded the VC

Cort, Jean Baptiste (1796-1875) Fr landscape painter founder of the impressionist school (Dance of the Nymphs Dante and Virgil)

Correggio, Antonio Allegri (1494-1534) It painter master of painting of human flesh and use of light and shadow (The Nativity The Night The Assumption)

Cort, Henry (1740-1800) Eng inventor and ironmaster patented grooved roller mills for rolling iron (1781) and his puddling process (1784)

Cortes Hernandez (1485-1547) Sp explorer conqueror of Mexico 1185

Cotgrave, William Thomas (born 1880) Ire statesman appointed privy of Dal Ireann (1922) re-elected (1923)

Costa, Sir Michael Andrew (1808-84) Sp Eng composer and conductor became leader of the Handel festival (1859) his best known oratorios are *Samson* and *Isa*

Coster, Laurens (1370-1440) Dutch printer said by the Dutch to have been inventor of typography about 1423

Cotway, Richard (1742-1821) Eng painter celebrated for his exquisite miniatures

Cotman, John Sell (1782-1842) Eng landscape painter famous for his water colours his two sons Miles Edmund and Joseph John also noted for their landscapes

Cotton, Sir Robert Bruce (1571-1631) Eng antiquary created baronet (1611) his valuable library of MSS and records was placed in Brit Museum (1753)

Couperus, Louis (born 1863) Dutch novelist his works noted for their philosophical outlook on life (The Small Souls The Later Life Old People and the Things that Pass)

Combat, Gustave (1819-77) Fr genre landscape and portrait painter founder of modern realist school (Combat of the Titans The Woman with a Parrot)

Courtenay, Bernard (1777-1838) Fr chemist who discovered iodine

Cowan, Victor (1792-1867) Ir philosopher called greatest modern eclectic did good work in reorganizing Ir public school system (1830-48)

Cousins, Samuel (1801-87) Eng mezzotint engraver made delicate copies of works by Lawrence Landseer Millais etc

Coutts, Thomas (1785-1822) Brit banker developed goldsmith firm of John Cumpbell into great business of Coutts and Co in London

Coverdale Miles (1488-1569) Eng translator of the Bible 1510

Cowen, Sir Frederic Hymen (born 1852) Eng musical composer produced many oratorios cantatas and anthems

Cowley, Abraham (1618-67) Eng poet and essayist espoused Royalist cause during civil war neglected by Charles II after Restoration best known works are *The Mistress* love verses and *Essays*

Cowper, William (1731-1800) Eng poet called to the Bar in 1754 but devoted his energies to literature becoming subject to fits of morbid depression was forced to undergo treatment at a private asylum afterwards he found a happy home with the Unwin family at Huntingdon in 1767 removed with the widowed Mrs Unwin to Olney where he met Rev J Newton whom he assisted in parochial work two of his most famous works are *The Task* and *John Gilpin*

Cox, David (1783-1859) Eng landscape painter went to London (1804) and worked as a painter of theatre scenery took to water colour work and soon established a great reputation (Peace

and War Going to the Hayfield The Church of Bettwys y Coed)

Cox, Richard (1500-81) Protestant reformer a favourite of Cranmer and Edward VI left Eng during Mary's reign was appointed Bishop of Ely by Elizabeth helped compile Book of Common Prayer

Crabbe, George (1754-1832) Eng poet was curate of Aldeburgh depicted country life scenes most faithfully called by Byron *Nature's sternest painter* and her best (Tales in Verse The Parish Register)

Craig, Lieut-Col Sir James (born 1871) Ir political leader entered parl (1906) Prime Minister of N Ir (1921)

Cranach, Lucas (1472-1554) Ger painter and engraver founder of Saxon school excelled in portraiture painted several portraits of Luther

Cranmer, Thomas (1480-1556) Archbishop of Canterbury obtained favour with Henry VIII by furthering his divorce from Catherine of Aragon appointed primate (1533) a keen Protestant and zealous reformer he was imprisoned in the Tower of London on the accession of Mary was burnt at the stake in Oxford for heresy

Crawford, Frances Marion (1854-1909) Amer novelist born in Ir wrote remarkable first novel *Mr Isaacs* dealing with occultism (A Roman Singer A Cigarette Maker a Romance)

Crawley, Sir Edward (1812-78) Eng historian chief justice of Ceylon (1880-70) (Fifteen Decisive Battles of the World)

Crawe, Robert O Crawe-Milnes, 1st Marquess of (born 1858) Brit statesman Lord high of Ire (1892-6) Lord Pres of the Council (1905-8 1915-16) Sec of State for the Colonies (1903-10) for India (1910-15) Pres of the Board of Education (1916) Chairman of London County Council (1917)

Cress, Francesco (1819-1901) It statesman one of makers of modern It helped Mazzini and Garibaldi premier (1887-91 1891-96)

Cress, Benedict (born 1866) It philosopher exerted great influence on modern idealistic philosophy (Philosophy of the Spirit)

Cressus (555-546 B.C.) last king of Lydia ascended throne (560 B.C.) conquered the Gk cities in Asia Minor but was deprived of his crown by Cyrus king of Persia in 546 B.C.

Cressy, John (1768-1821) Eng landscape painter and etcher originally a house decorator most of his paintings are of scenery round Norwich (Monsieur Heath Chapel Field Norwich)

Cresser, Evelyn Baring Earl of (1841-1917) Brit statesman and diplomatist directed and reorganized Egyptian govt while Brit agent (1883-1907) called maker of modern Egypt (Modern Egypt Abbas II)

Crompton, Samuel (1759-1827) Eng inventor of spinning mule 1506

Cromwell, Oliver (1599-1658) Eng puritan soldier and statesman 853

Cromwell, Richard (1626-1712) 3rd son of Oliver Cromwell Lord Protector (Sept 1658 May 1659)

Cromwell, Thomas (1485-1540) Earl of Essex Brit statesman entered Cardinal Wolsey's service as confidential servant (1524) after Wolsey's fall took service with Henry VIII became his trusted minister strengthened the royal authority and as the king's viceregent in ecclesiastical matters suppressed the monasteries and furthered the Reformed doctrines created Earl of Essex (1559) fell into disfavour through attempting to unite Henry in an alliance with the Protestant prince of Ger was arrested, charged with high treason and beheaded on Tower Hill

Cromwell, Peter (1840-1911) Boer general captured Jameson raiders (1896) surrendered to Lord Roberts at Paardeburg (1900) imprisoned on St Helena till 1902 picture 211

Crookes, Sir William (1832-1919) Eng chemist and physicist 1183

Cruikshank, George (1792-1878) Eng caricaturist, etcher and illustrator, illus

trated some of Dickens's works and those of Scott, Goldsmith and Ainsworth

Cumberland, William Augustus, Duke of (1721-85) 3rd son of George II of Eng distinguished for his courage on the battlefield behaved with great cruelty at Culloden Moor where he defeated Prince Charles (1746)

Cunard, Sir Samuel, Bart (1787-1865) Eng shipowner born Nova Scotia founder of Cunard steamship line 1840

Curie, Marie Sklodowska (born 1867) Fr physicist born in Poland 391

Curie, Pierre (1859-1906) Fr physicist co discoverer of radium 391

Curry, Gen Sir Arthur William (born 1875) Canadian general served with distinction in World War appointed commander of Canadian Corps (1917)

Curry, Sir Donald (1825-1909) Scot shipowner and politician founded Castle line (1882) amalgamated with Union line (1900) M P for Perthshire (1880-85) and for W Perthshire (1885-1900)

Curnon, of Kedleston, George Nathaniel, 1st Marquess (1859-1925) Brit Conservative statesman Gov Gen of India (1899-1905) Member of Imperial War Cabinet (1916) Leader of House of Lords (1916-1924) Foreign Sec (1919)

Cuvier, Georges, Baron (1769-1832) Fr naturalist pioneer in palaeontology studied zoology while holding tutorship at Caen (1788-94) conceived idea of new classification of animals based on comparison of fossils with living species held various professorships in Paris visited Eng in 1818 and the next year Louis XVIII made him minister of the interior

Cuyper, Albert (1820-91) Dutch landscape painter most of his finest pictures are in the National Gallery (River Scene with Castle)

Cyrus the Great (c. 600-528 B.C.) founder of Persian empire united Media and Persia (549) conquered Lydia (546) and Babylon (539) died making a nomadic tribe

Cyrus the Younger (424? 401 B.C.) King of Persia after unsuccessful plotting against his elder brother Artaxerxes raised a large army and marched against him but was defeated and slain at Cunaxa

Czerny, Karl (1791-1857) Austrian pianist and composer teacher of Liszt piano forte exercises still much used picture 399

D

D'Abernon, Edgar Vincent, 1st Baron (born 1857) Brit financier and diplomatist financial adviser to Egyptian Gov (1883-89) appointed Brit ambassador to Berlin (1920)

Daeguere, Louis Jacques Mandé (1789-1851) Fr painter and physicist inventor of photography by the daguerreotype process in which he was associated with J. N. Niepce

Daimler, Gottlieb (1834-1900) Ger engineer invented the Daimler motor car engine

Dalhousie, George Ramsay, 9th Earl of (1770-1838) Brit soldier and admiral traitor one of Wellington's generals in the Peninsular War and at Waterloo Lieut Gov of Nova Scotia (1818-20) Gov Gen of Canada (1820-28) founded Dalhousie University

Dalhousie, James Andrew Bruce Ramsay, 10th Earl and 1st Marquess (1812-60) Brit soldier and administrator Gov Gen of India (1849-58) annexed Punjab and other native states carried out many public works

Dalton, John (1766-1844) Eng chemist and physicist, discoverer of the Atomic theory, colour blind himself he gave the earliest account of colour blindness or Daltonism

Damien, Father (1840-89) Belgian priest missionary to the lepers of Molokai Hawaiian Isles died of leprosy

Dampier, William (1652-1715) Eng buccannier and explorer buccannier in central and S America and S India (1679-88) sent by Eng Admiralty (1699) to explore coasts of Australia and

New Guinea privateering in South Seas (1703-7) when he marooned Alexander Selkirk (prototype of Robin Crusoe) on island of Juan Fernandez wrote accounts of his voyages

Dandolo, Enrico (1120? 1205) Doge of Venice led the fourth Crusade in person captured Constantinople (1204) and established the Latin Empire

Danais, Arnaud (died 1199) most famous of the troubadours a knight of Perigord he was attached to the Court of Richard Cœur de Lion invented the verse form the *serena*

Dante Alighieri (1265-1321) Italian poet 443

Danton, Georges Jacques (1759-94) Fr revolutionist after the fall of Louis XVI became Minister of Justice among leaders of the Mountain in National Convention prominent in creating revolutionary tribunal and an original member of Committee of Public Safety opposed the Terror and was guillotined

Darius I the Great (died 485 B.C.) King of Persia son of Hytaspes he dethroned the usurper Gaumata and became king in 521 captured Babylon and conquered Thrace and Macedonia sent two armies to Greece to avenge the destruction of Sardes by the Athenians the first of which was repulsed on Mt. Athos and the second at Marathon (490)

Darius III (died 330 B.C.) King of Persia the last of the Achemenid line he was defeated at Issus (333) and Arbela (331) by Alexander the Great and was killed by Bessus his cousin

Darling, Grace (181-42) Eng heroine 811

Darnley, Henry Stuart Lord (1545-87) 2nd husband of Mary Queen of Scots instigated the murder of Rizzio and was found dead in the garden of a house called Kirk o' Field

Darwin, Charles Robert (1809-82) Eng biologist 489

Darwin Erasmus (1731-1802) Eng scientist and poet grandfather of Charles Darwin in 1789 he published his poem, *The Botanic Garden* including *The Loves of the Plants* in 1794 98

Darwin, Sir Francis (born 1848) Eng botanist 3rd son of Charles Darwin reader in botany at Cambridge president of the Brit Association 1908 wrote *Foundations of the Origin of Species* and a life of his father

Darwin, Sir George Howard (1845-1912) Eng astronomer eldest son of Charles Darwin in 1885 appointed professor of astronomy and experimental philosophy at Cambridge leading authority on the theory and calculation of the tides

Darwin, Leonard (born 1850) Eng scientist 4th son of Charles Darwin observed transit of Venus (1874 and 1882) on staff of Intelligence Dept at War Office (1885-90) president of R.G.S. (1908-11) president of Eugenics Society (1911)

Dass, Petter (1647-1708) Norwegian poet father of modern Norwegian poetry son of Peter Dundas Dundas merchant in 1689 received living of Alstahong poems include *Trumpet of Nordland* *The Norwegian Song of the Valley* and *Spiritual Pastime*

Dauhin, Charles François (1817-78) Fr landscape painter a typical representative of the Barbizon school painted *Spring Time* and *Moonlight*

Daudet, Alphonse (1840-97) Fr novelist his writings include *Fromont Jeune et Rigier* (1874) *Tuck* (1876) and the three *Tartarins*

Davenant, Sir William (1606-68) Eng poet and dramatist his first play the tragedy *Albion* started him on his dramatic career in 1637 succeeded Ben Jonson as poet laureate among his works are *Godsbert* and *The Siege of Rhodes*

David, second king of Israel youngest son of Jesse slew the giant Goliath in single combat formed friendship with Jonathan made armour bearer to Saul for skill in music through Saul's jealousy collected a band of aggrieved men in cave of Adullam elected king when Saul committed suicide and Jonathan was slain author of some of the Psalm.

David, or Dewi Sant patron saint of Wales (died 601?) Bishop of Menevia now St David's

David I (1084-1153) King of Scotland youngest son of Malcolm Canmore succeeded in 1124 after the death of Henry I he supported the claims of his niece Matilda against Stephen but was routed at the battle of the Standard near Northallerton (1138) called the *Maker of Scotland*

David II (1324-71) King of Scotland son of Robert Bruce during invasion by Bahol in 1333 he was in France but returned in 1341 in 1346 captured at Neville's Cross and imprisoned for ten years when he was released on ransom

David, Jacques Louis (1748-1825) Fr painter Napoleon appointed him his chief painter and employed him in decorating the Hall at Versailles

Davidson, John (18-7 1900) Eng poet his writings include the fantastic play, *Brue and Scaramouch as Nazos* in a Music Hall *Fleet Street* *Clougue* *Ballads and Songs* and *Perfervid*

Davidson, Randall Thomas (born 1848) Eng prelate dean of Windsor (1893) Bishop of Rochester (1891) Bishop of Winchester (1890) succeeded Temple as Archbishop of Canterbury (1893)

Davies, Benjamin (Ben) (born 1838) Welsh singer after studying at the R.A.M. secured an engagement with Carl Rosa debut in 1881 at Birmingham in *The Bohemian Girl*

Davies, Henry Walford (born 1869) Eng organist and composer in 1884, assistant organist to Sir Walter Parratt at St George's Chapel Windsor in 1898 organist of the Temple Church London conductor of the London Bach Choir (1903-7) director of music to the R.A.I. (1918) became prominent as a composer with his cantata *Herse Rial*

Davies, Hubert Henry (1869-1917) Fr playwright his comedies include *Cousin Kate* *Mrs Gorrings* *Necktie* *The Molliu* *Doormat*

Davies, William Henry (born 1870) Eng poet writings include *The Soul* *Destroyer* *Songs of Joy and Others* and *The Autobiography of a Super Tramp*

Dave, Jefferson (1808-89) Amer statesman and soldier in 1845 elected to Congress in 1847-51 and 1857-61 member of the Senate in 1861 unanimously elected President of the Confederate Congress in the Civil War was much hampered by the Confederate Congress was captured at Irwinville Georgia and imprisoned until 1869

Davis, John (1550? 1603) Brit navigator in 1580-1586 and 1587 in command of expeditions to discover a N.W. passage discovered the strait named after him in 1592 discovered the Falkland Isles killed by pirates in the straits of Malacca

Davitt, Michael (1846-1906) Irish nation alist politician youth embittered by eviction of parents in 1866 joined Fenian movement and in 1870 convicted of treason felony and sentenced to fifteen years penal servitude in 1871 helped to found Irish Land League after being twice elected for Merth and unseated was returned for S Mayo in 1896 helped to start the United Irish League (1898)

Davy Sir Humphrey (1778-1829) Eng chemist invented miner's safety lamp and discovered nitrous oxide (laughing gas) president of Royal Society (1820) 906, 910, 911, 912

Dawkins, William Boyd (born 1838) Eng geologist became professor of geology at Manchester (1872) pres of geological section of the Brit Association (1881) wrote *Cave Hunting* *Larry Man in Britain* etc

Dawson of Penn, Bertrand Edward Dawson, 1st Baron Eng physician leading authority on gastric disorders physician in ordinary to King George V

Deak, Franz (Ferenc) (1803-76) Hungarian statesman chief organizer (1867) of Austro-Hungarian dual monarchy

Deborah Hebrew heroine prophetic, and judge defeated the Canaanites under Sisera

Debussy, Claude Ashille (1862-1918) Fr composer. Works include *Pelléas et Mélisande* and *L'Après-midi d'un Faune*.

Decius Mus, Publius (died 340 B.C.) Rom consul in battle against the Latins rushed into the midst of his foes when his troops showed signs of giving way.

Defant, Marie de Vergy-Chambray, Marguerite du (1607-1780) Fr letter writer became the centre of a brilliant literary and social circle.

Defoe Daniel (1659-1731) Eng novelist and journalist. author of Robinson Crusoe twice imprisoned and thrice pilloried for his pamphlets. Largely instrumental in promoting the union of Scotland and England wrote *Journal of the Plague Year* and *Captain Singleton*. (Colonel Jacques Moll Flandere) and other realistic romances.

Delacroix, Ferdinand Victor Eugène (1798-1855) Fr painter leader of the Romantic movement. a great colourist. his paintings include *The Massacre of the Bishop of Joux*, *Drawing of Lots in the Boat at Sea* (from Byron's *Don Juan*) and *Taking of Constantinople by the Christians*.

De la Mare Walter (born 1873) Eng poet and novelist. his writings include *Peacock Pie*, *Memoirs of a Midget* and *The Three Mullis Mullers*.

Delann, John Theodorus (1817-79) Brit journalist. joined *The Times* in 1840 and in 1841 became editor which post he retained for 36 years.

Delaroy Jacobus (1848-1915) Boer general. assistant commandant general of Transvaal army in the 2nd African War (1899-1902).

Delbrück Hans Georg Ludwig (born 1848) Ger historian. member of Reichstag (1884-90). from 1893 editor of the *Prussian Yearbook*. his writings include *History of Warfare in Relation to Political History* and *The Strategy of Battles Illustrated by the Strategy of Frederick the Great*.

Delcassé Théophile (1852-1929) Fr statesman instrumental in cementing Triple Alliance and in alliance with Russia. foreign minister (1898-1902) and several times between 1911 and 1915. ambassador to Russia 1913-14.

Della Robbia Andrea (1435-? 1525?) Florentine sculptor. nephew and greatest pupil of Luca della Robbia; one of his finest works is the series of medallions on the front of the founding hospital Florence.

Della Robbia Giovanni (1469-1529?) Florentine sculptor. son of Andrea della Robbia; a splendid example of his work is the tabernacle in the church of San Tolomeo at Volterra representing the Last Judgment.

Della Robbia Luca (1400-? 82) Florentine sculptor. the earliest and greatest of the famous della Robbia family. who were noted for their representation of children. he was the first sculptor to work in glazed baked clay and to use coloured (fired) reliefs in architecture. best known for his exquisite singing gallery executed for the cath at Florence. a cast of which is in the Victoria and Albert Museum London.

Demetrius (died 1606) Rus pretender. appeared about 1600. took name of son to the throne who had been secretly killed by the usurping Tsar Boris Godunov and reigned ably and vigorously until his murder.

Demetrius surnamed Poliorcetes (the sacker) King of Macedonia (337-283 B.C.) besieged Rhodes with elaborate machinery 305-304 B.C. established supremacy over Macedonia and Greece. seized throne 294 B.C. expelled by Pyrrhus.

Democritus (5th cent B.C.) Gr philosopher. advanced the theory of the mechanical formation of the universe by atoms in motion.

D Morgan, William Frank (1839-1917) Eng novelist. among his best works are *Joseph Vance*, *Allice for short* and *Somewhere*. Good.

Demosthenes (384-322 B.C.) Gk orator. most masterly speeches are his Philippics and Olynthiacs against Philip of Macedonia. King of Antipater poisoned

himself rather than fall into his enemies hands.

Denton, Anton (born 1872) Rus soldier on general staff in early stages of World War after the revolution of 1917 became anti-Bolshevik Cossack commander operating between the Caspian and Black Seas routed in 1920 came to Eng.

Denis (Dionysius) Saint (died 275?) patron saint of Fr. 1st bishop of Paris during a missionary visit to Gaul was beheaded by the Rom governor.

Dewey, Chauncey Mitchell (born 1834) Amer lawyer and politician. U.S. senator from New York (1899-1911).

De Quincey, Thomas (1785-1859) Eng essayist. born in Manchester ran away as a boy and experienced the adventures described in his *Confessions of an English Opium Eater*. acquired opium habit by using it medicinally. his writings include *The English Mail Coach*, *A Vision of Sudden Death*, *Suspensa de Profundis* and *On Murder Considered as One of the Fine Arts*.

Derby Edward Geoffrey Smith Stanley 14th Earl of (1799-1869) Brit statesman. Prime Minister (1852-58, 59-1866-68) translated the Bhad.

Derby Edward Henry Smith Stanley 15th Earl of (1826-93) Brit statesman. in 1882 he was for India arranged transfer of Indian Govt from the company to the Crown. Foreign Sec (1868-68) in 1873 succeeded to the Liberal Party (colonial Sec (1884-85) became a Liberal (moment) (1886).

Derby Edward George Villiers Stanley 17th Earl of (born 1866) Brit statesman. entered Parl (1882) financial Sec to the War Office (1900) 1st minister Gen (1903) Director Gen of Recruiting (1915-16) War Minister (1916-18, 1920-23) ambassador to France (1918-20).

Derby, Frederick Arthur Stanley 16th Earl of (1841-1908) Brit statesman and colonial administrator. Gov Gen of Canada (1888-93).

Dermot Mac Murrough (died 1171) Ir king of Leinster. first introduced the Eng into Ir. having been dethroned sought the aid of Henry II of Eng.

Dernburg, Bernhard (born 186) Ger financier. Pres of the Bank of Trade and Industry (1900) (colonial Sec (1906-10).

De Robeck Sir John Michael, Bart (born 1862) Brit admiral in World War in charge of the landing at Gallipoli. (commander in chief of the Mediterranean Fleet (1919) and of the Atlantic Fleet (1920-21).

Déroulède Paul (1846-1914) Fr author and politician. achieved popularity with his patriotic *Chants du soldat*. he espoused the Boulangist cause and founded the *League of Patriots*. supported in 1889. banished for intriguing against the gov (1900-08) other works include *Refrains Militaires*, *Poésies Militaires* and *Chants du Paysan*.

Desaix de Vaygoux, Louis Charles Antoine (1768-1800) Ir soldier. brilliantly defended the fortress of Kehl against the Austrians (1796). made possible Napoleon's success at Marengo (1800) but was himself killed.

Descartes, René (1596-1650) Fr philosopher and mathematician. made important discoveries in algebra and geometry. works include *Principia Philosophiae* and *Meditationes de Prima Philosophia*.

Deschanel, Paul Eugène Louis (1856-1922) Fr statesman. Pres of France (1920) but resigned the same year. his writings include *Figures de Femmes* and *Figures d'Hommes*.

Desmoulins, Camille (1760-94) Fr revolutionist. a prime mover in the Rev. his writings exercised a great influence. became Sec to Danton and was elected by Paris to the National Convention afterwards his moderation led to his execution with Danton.

Despenser, Hugh de (1262-1326) Eng courtier. leader of the barons party against Edward I. subsequently be-

came Edward's principal adviser. the arrogance and rapacity of his son Hugh largely responsible for their fall.

D'Espèry, Louis Franchet (born 1856) Fr general in 1918 commanded the allied offensive in the Balkans. commander of the 5th Army at the Marne made marshal (1921).

De Tally, John Byrne Leicester Warren, 3rd Baron (1835-95) Eng poet. his poems include *Præterita*, *Philocletes* and *Poems Dramatic and Lyrical*.

Deville, Jean Baptiste Edmond (1848-1912) Fr artist. his paintings include *The Dream*, *"Sortie of the Garrison of Humbugue"* and *Bonaparte in Egypt*.

De Valera, Eamon (born 1882) Irish republican leader of mixed Sp and Irish birth. elected to the Brit Parl (1917) pres of the Irish Republic (1919-22) demanded unqualified independence and opposed treaty establishing Irish Free State after ratification of the treaty he resigned office as pres and sought re-election but was defeated.

Devonport, Hudson Ewanke Kearley, 1st Viscount (born 1856) Brit business man and politician. Parl Sec to the Board of Trade (1905) first chairman of the Port of London Authority (1909) first Food Controller (1916-17).

Devonshire, Georgiana, Duchess of (1757-1806) Eng beauty. married the 5th Duke of Devonshire (1774) to secure the return of Fox to the Westminster election (1784) is said to have exchanged kisses for promises of votes.

Devonshire, Spencer Compton Cavendish, 8th Duke of (1833-1908) Eng statesman. leader of the Liberal Unionists.

Devonshire, Victor Christian William Cavendish, 9th Duke of (born 1868) (civil Lord of the Admiralty (1915-16) (Gov Gen of Canada (1916-21) (colonial Sec (1922-23).

Dewar Sir James (born 1842) Brit physicist. Jullien professor of chemistry at the Royal Institution (1877) pres of the Brit Association (1902) joint inventor with Sir Frederick Abel of cordite. best known for his work on the liquefaction of gases.

De Wet, Christian (1854-1922) Boer gen. commander in chief of the Orange Free State forces in the 2nd African War (1899-1902) rebelled in 1914 but was defeated and taken prisoner.

Dewey, George (1857-1917) Amer sailor in command of the Asiatic squadron in the Sp Amer war. he completely defeated the Sp fleet in Manila Bay. pres of U.S. naval general board (1900).

Dias or Dias de Novais, Bartholomew (died 1500) Port navigator. discoverer of the Cape of Good Hope.

Dias, Marcus Virgilio (1808-70) Ir painter. became famous among the Harbison School for his storm and forest subjects.

Diaz Porting (1880-1915) Pres of Mex. led successful rev in 1871 and became pres in 1877. from 1884 to 1910 he was regularly re-elected. resigned in 1911 in consequence of revolt by Madero.

Deasy Albert Venn (1835-1922) Eng jurist. Victorian professor of Eng Law at Oxford (1882-1904) his writings include *Law of the Constitution*.

Deasy, Edward (1832-1911) Eng journalist and author. editor of *The Observer* (1870-89) works include *England and Egypt*, *Bulgaria the Peasant State*, and *The Egypt of the Future*.

Delgans, Charles (1812-70) Eng novelist, 527.

Delmas, Sir Francis (Frank) (born 1863) Eng artist. P.R.A. 1925. paintings include *The Confession*, *Harmony*, *The Funeral of a Viking*.

Diderot, Dami (1713-84) Fr man of letters in 1749 his daring and original *Lettre sur les Aveugles* led to his imprisonment for next 20 years worked on the great Fr Encyclopædia. in his old age the Empress Catherine of Russia bought his library and appointed him custodian.

Digby, Sir Knecht (1608-66), Eng. writer, diplomat, and naval commander; defeated the Fr. and Venetians at Alexandria (1628), put in prison for engaging in Royalist intrigues and twice banished, chancellor to Queen Henrietta Maria, his writings include "Of Bodies" and "Of the Immortality of Man's Soul", said to have been the first to note the importance of oxygen to plant life.

Dicks, Sir Charles Wentworth, Bart. (1843-1911), Eng. politician, Under-Sec for Foreign Affairs (1880-82), Pres. of Local Govt. Board (1882-85).

Dillon, John (born 1861), Irish Nationalist politician, in 1880 elected M.P. for Tipperary, in 1885 Member for East Mayo, which he represented for over 30 years, succeeded John Redmond in 1918 as leader of the Irish in the House of Commons.

Diolethian (Gaius Aurelius Valerius Diocletianus) (A.D. 245-313), Roman emperor, his reign was distinguished by his victories over the barbarians and his fierce persecution of the Christians, abdicated (305).

Diogenes (412?-323 B.C.), Gr. cynic philosopher, lived in a tub in Athens, and later at Corinth, having been captured by pirates and sold to a wealthy Corinthian, eschewed social and political questions and preached the doctrine of self-control.

Dionysius the Elder (432?-367 B.C.), tyrant of Syracuse, began life as a clerk but later joined the army and made himself master of Syracuse by constant campaigns extended his rule.

DIsraeli, Benjamin, Earl of Beaconsfield (1804-81), Brit. statesman, 199.

DIsraeli, Isaac (1766-1848), Eng. man of letters, of Jewish parentage, father of the Earl of Beaconsfield, his best known works are "Curiosities of Literature," "Calamities of Authors," "Quarrels of Authors," and "Amenities of Literature."

Dobell, Sydney (1824-74), Eng. poet and man of letters, his writings include "The Roman," "Balder," and "England in Time of War", one of the first to introduce the system of co-operation into private enterprise.

Dobson, Henry Austin (1840-1921), Eng. poet and man of letters, in the Board of Trade (1866-1901), wrote "Proverbs in Prose," "Old World Idylls," "At the Sign of the Lyre," "Eighteenth Century Vignettes," and biographies of Goldsmith, Hogarth, Henry Burney, etc.

Doggett, Thomas (died 1721), Irish actor, became part manager in Drury Lane and Haymarket theatres, founded the race for Doggett's Coat and Badge, rowed annually by Thames watermen.

Dolbear, Professor A. E., experimented in telephony and wireless telegraphy, 2.

Dollinger, Johann Josef Ignaz von (1799-1890), Ger. theologian, in 1826 appointed professor of ecclesiastical history at Munich, in 1861 he delivered a course of lectures against the temporal supremacy of the Pope, and when the Vatican Council of 1870 proclaimed the dogma of the infallibility of the Pope he refused to subscribe to the decree, for this he was excommunicated, he became the leader of the "Old Catholic" party.

Domenichino, Zampieri (1581-1641), It. painter, excelled in religious frescoes, and in landscapes, his masterpieces are "The Last Communion of St. Jerome."

Domini, St. (1170-1221), Sp. priest, founder of the Dominican Order of Preaching Friars.

Domitian (Titus Flavius Domitianus) (A.D. 81-96), Roman Emperor, younger son of the Emperor Vespasian, succeeded his brother, Titus, in 81, assassinated for his cruelties.

Donald, Sir Robert (born 1861), Scot. journalist, for some years editor of the *Daily Chronicle* and *Lloyd's News*, during the World War was a director of the Ministry of Information.

Donatello (1386?-1466), Florentine sculptor, his works are the supreme expression of the early Renaissance, among his great works are the noble equestrian statue in bronze of the famous condottiere

Gattamelata, at Padua, and the bronze statue of David in the Bargello.

Donizetti, Gaetano (1797-1848), It. musical composer, wrote over 80 operas, of which the most popular include *Lucia di Lammermoor*, *L'Elisir d'Amore*, *Don Pasquale*, and *La Fille du Regiment*.

Donne, John (1572-1631), Eng. writer and divine, dean of St. Paul's, his "Satires" are probably the earliest Eng. poems of their kind, his prose writings include "The Pseudo-Martyr" (1610), a reply to Bellarmine and "Biathanatos," an apology for suicide.

Doré, Gustave (1832-83), Fr. painter and illustrator, seen at his best in his illustration to Balzac's "Contes Drolatiques," Dante's "Divine Comedy," "Don Quixote," "Paradise Lost," and the Bible.

Dorset, Thomas Sackville, 1st Earl of (1530-1608), Eng. statesman and poet, one of the chief advisers of Queen Elizabeth wrote the Induction and the Complaint of the Duke of Buckingham for A Mirror for Magistrates, a sort of textbook of Brit. history showing the evils of ambition, was part author of *Gorboduc* or *Ferrex and Porrex*, the first Eng. tragedy.

Dostoevski, Feodor (1821-81), Rus. novelist, dealt with peasant life and social problems, his works include *Poor Folk* (1846), "Downfallen and Oppressed" (1861), and "Crime and Punishment" (1866).

Douglas, Gavin (1474?-1522), Scot. poet and bishop, became bishop of Dunkeld in 1513, his chief writings are the allegorical poems, "The Palace of Honour," and "King Hart," and a translation of the "Aeneid."

Douglas, James, Lord (1266-1330), surname "The Good" and "The Black," was a devoted follower of Bruce, and made several raids into England, was commissioned to take Bruce's heart to Palestine, but died fighting the Moors in Spain.

Douglas, James, 2nd Earl of (died 1388), having captured Hotspur's pennon, Percy sought revenge at Otterburn, where Percy was captured, but Douglas fell.

Douglas, Sir James (1826-98), Eng. light-house engineer, 260.

Doulton, Sir Henry (1820-97), Eng. pottery manufacturer, 521.

Dozon, Gaston (born 1843), Fr. politician, succeeded Millerand as president (1924-25), Minister for the Colonies (1902-5), President of the Council and Foreign Minister (1913-14), subsequently again Foreign Minister.

Downes, Edward (1849-1913), Irish literary critic, his writings include "Blake-spere, His Mind and Art" (1875), and "Life of Shelley" (1886).

Dayle, Sir Arthur Conan (born 1859), Brit. novelist, his best known stories include "A Study in Scarlet," "The Hound of Four," "Adventures of Sherlock Holmes," "The White Company," "Rodney Stone," and "Sir Nigel."

Dease (7th cent. B.C.), archon or magistrate of Athens, compiled the first written code of Athenian laws.

Drake, Sir Francis (1543?-96), Eng. naval commander, 861.

Drayton, Michael (1563-1631), Eng. poet, his chief works are "Polyolbion," "Nymphidia," and the "Ballad of Agincourt."

Dreyfus, Alfred (born 1860), Fr. (Jewish) military officer, arrested on a charge of selling military secrets to Germany, degraded, and imprisoned on Devil's Island in Guiana, in 1906 he was declared innocent and restored to the army.

Drinkwater, John (born 1882), Eng. poet, playwright, and critic, his works include studies of William Morris and Swinburne, *Cophetua*, *Rebellion* (play in verse), *Abraham Lincoln*, *Oliver Cromwell*, *Robert E. Lee* (play), and numerous volumes of verse.

Drummond, Henry (1511-47), Scot. religious writer and scientist, wrote "The Ascent of Man," "Natural Law in the Spiritual World."

Drury, Alfred (born 1857), Eng. artist and sculptor, R.A. (1913), his "St. Agnes"

(bronze head) was purchased for the Chantry collection.

Drusus, Nero Claudius (38-9 B.C.), Roman soldier, brother of Tiberius, surnamed Germanicus because of his successes against the Germans.

Dryden, John (1631-1700), Eng. poet, went to London (1657), and produced an elegy on the death of Cromwell, hailed the Restoration with his "Astraea Redux" and rapidly rose in reputation and position, his "Essay on Dramatic Poesy" was followed by several successful tragedies, in 1667 wrote the "Annus Mirabilis," and in 1668 was appointed poet laureate, in 1681 wrote his greatest poem, "Absalom and Achitophel," followed by the "Medal," and "Belshazzar's Feast" after the accession of James II, joined the Church of Rome, and, in 1687, published "The Hind and the Panther," a religious allegory, the Revolution deprived Dryden of all his posts, and he reverted to dramatic writing.

Du Barry, Marie Joanne, Comtesse (1746-93), favourite of Louis XV, was executed during the reign of terror, 476.

Dubou, Guillaume (1851-1728), Fr. statesman and prelate, became Foreign Minister, and in 1672 Prime Minister, made a cardinal (1720).

Dubou, Paul (1826-1906), Fr. sculptor and painter, chiefly famed for tomb of General Lamouriere at Nantes and Joan of Arc statue at Rheims.

Duckworth, Sir John Thomas (1748-1817), Brit. admiral, defeated the French fleet at St. Domingo (1806), effected the passage of the Dardanelles (1807).

Duclavant, Amantine Lucile Aurore Dupin (1804-76), Fr. author, better known as George Sand, in 1832 she published "Indiana," a romance which at once secured her reputation and "Valentine" and "Andre," and "Simon" followed, she started the *Revue Independent* to which she contributed several romances, including "Consuelo," 784.

Dudley, Lord Guildford (died 1554), husband of Lady Jane Grey, executed for attempt to place his wife on the throne.

Duff, Alexander (1806-78), Scottish missionary, one of the first to work in India where he served from 1830-51.

Duff, Sir Mountstuart Elphinstone Grant (1824-1906), Brit. politician and author, in 1864 was appointed Under-Secretary of State for India, and later Under-Secretary of State for the Colonies, Governor of Madras (1881-86).

Dufferin and Ava, Frederick Temple Blackwood, 1st Marquis of (1826-1902), Brit. diplomat, Gov.-Gen. of Canada (1872-78), was ambassador to Russia, Turkey, France, and Italy Viceroy of India (1884-88), during his administration Burma was annexed to England.

Duffy, Sir Charles Gavan (1816-1903), Irish nationalist and Australian statesman, convicted of sedition in 1844, but conviction set aside, proceeded to Melbourne, and became Prime Minister of Victoria (1871).

Dugdale, Sir William (1606-86), Eng. antiquary, wrote *Monasticon Anglicanum*, "Antiquities of Warwickshire," and *History of St. Paul's Cathedral*.

Duke, Sir Henry Edward (born 1855), Brit. lawyer and politician, Chief Secretary for Ireland (1916-18), appointed president of Probate, Divorce, and Admiralty Division (1919).

Dulac, Edmund (born 1882), Fr. artist, resident in Gt. Brit., has illustrated many books.

Dumas, Alexandre (1802-70), Fr. novelist and dramatist, produced the tragedy *Christine a Fontainebleau* in 1823, *Henri III* in 1829, and later *La Reine Margot* besides many plays, wrote numerous romances, chief being "The Three Musketeers," and various sequels, also "Count of Monte Christo."

Dumas, Alexandre (1824-97), Fr. novelist and dramatist, son of preceding, in 1848 produced the work which made his reputation—"La Dame aux Camélias," his plays include *Dem. Moore* (1853), *La Princesse Georges* (1872), *Monsieur Alphonse* (1873), and *Domino* (1885), elected to Fr. Academy (1874).

Du Maurier, George Louis Palmella Bosson (1834-96) Brit artist and novelist born in Paris contributor to *Punch* his pictorial satires were noteworthy author of *Peter Ibbetson* *Trilby* *The Martian*

Dumas, Charles François (1739-1823) Fr general on first symptoms of the great revolution was made minister for foreign affairs then minister of war and later command of the army in the north gained victory of Valmy (1792) but was defeated at Neerwinden (1793) became an exile in England

Dunant, Jean Henri (1828-1910) Swiss philanthropist and writer founded the Red Cross Society

Dunstan, Adam, Viscount (1731-1804) Eng admiral in 1797 inflicted heavy defeat on Dutch off Camperdown

Dunstable Thomas Cochrane, 10th Earl of (1775-1860) Brit sailor distinguished himself against the French in 1801 and 1805 imprisoned on charge of having fraudulently or slanted news of Napoleon's fall in went to S America on his release and rendered brilliant services to the British and Brazilians returning to England his honours were restored by William IV

Dunsterley W A See *Oxenham, John*
Dunlop John Boyd (1839-1921) Ir veterinary surgeon and inventor gave his name to inflated bicycle tyre which he invented in 1888

Dunne Finley Peter (born 1867) American humorist and journalist creator of Mr Dooley who figures in Mr Dooley in Peace and War and Mr Dooley's Philosophy

Dunsany Edward Plunkett, 18th Baron (born 1878) Ir author and dramatist his writings include *The Gods of Lemnos* *Tales of War* *Tales of Three Hemispheres* among his plays are *The Gods of the Mountains* *A Night at an Inn*

Dunstan St C (c 900-88) appointed Abbot of Glastonbury by King Edmund and in 946 on the accession of Eadred he became chief advisor to the king, he pushed by Eadred he held a Bench of the money in London till he called by King Edgar to whom he was appointed Bishop of London became Archbishop of Canterbury

Dupont, Joseph François Marquis (1669-1783) French greatest governor in India while he obtained during his activities was recalled in 1754 and died in poverty 794 798

Dupré, Jules (1812-89) Fr landscape painter of the Barbizon movement school famous by decorating his father's pottery

Dyer Albrecht (14-1 1728) Ger artist at 1, executed a part of work in chamber representing the seven falls of Christ became court painter to the Emperor Maximilian and after to Charles V his list of works contains 134 pieces

Durham, John George Lambton, 1st Earl of (1792-1840) Brit statesman as lord privy seal in Grey's ministry helped to draft the Reform Bill of 1832, after being ambassador at St Petersburg (1835-37) was appointed Gov Gen of Canada his Report on the Affairs of British North America was the basis of present Dominion of Canada and initiated the principles of Brit colonial policy

Duse, Eleonora (1833-1924) It actress played tragic and emotional parts with great success in various countries

Duval, Claude (1843-70) Eng highway man hanged at Tyburn

Duven, Sir Joseph Joel (1848-1908) Anglo-Dutch art dealer gave the Turner wing to the Tate Gallery

Dvorák, Antonín (1841-1904) Bohemian musical composer son of an inn keeper his works include symphonies *A Shost Water* and a cantata *The Spectre Bride*

Dyck, Sir Anthony van See *Van Dyck*
Dyer, Reginald (born 1864) Brit gen his action during the Amritsar rioting in 1919 when he gave the order to fire on the rioters was the subject of inquiry by a committee, which severely censured him

Dyson Sir Frank (born 1868) Eng astronomer became astronomer royal for Scot (1905) and astronomer royal for Eng (1910)

E

Eadmer, (died c1124) Eng monk and historian friend and spiritual director of Anselm chief work *Historia Novorum* a chronicle of events from 1066 to 1122

East, Sir Alfred (1849-1913) Eng landscape painter his paintings grace many European art galleries R A 1918

Eastlake, Sir Charles Locke (1793-1865) Eng painter and art critic became pres of Royal Academy in 1860 director of National Gallery (1855) Christ Bearing Little Children (1839) and Christ Weeping Over Jerusalem (1841) are considered his best pictures

Ebers, Georg (1837-98) Ger Egyptologist and novelist while visiting Egypt discovered the hieratic medical papyrus known as Papyrus Ebers which he published in 1875

Ebert, Friedrich (1871-1925) Ger statesman leader of the social Democratic Party he became the first pres of Ger (1919) in early life was a saddler

Ebsen, Jacob (1832-1916) Sp poet dramatist and politician his dramas over 80 in number were most popular shared Nobel prize for literature (1904)

Eck or Eckart Johann (1486-1543) Ger theologian argued against the reformed doctrines in disputes with Luther (1518) and others

Eckhart, Johannes (c1260-1327) Ger mystic of the 14th cent entered the Dominican order and became provincial prior of Saxony his Pantheistic views were condemned and he afterwards repudiated them

Eddy Mary Baker (1821-1910) Amer religious founder of Christian Science her science and Health the best book of the Christian Scientists, is greatly esteemed by her numerous followers

Edgar or Eadgar (844-76) King of Eng son of Edmund I became ruler of Eng x of the Danes after the invasion of 878 and sole sovereign on death of his brother Eadwy in 900

Edgar Atheling or Eadgar the Atheling (c1053 or 1140) Son of Edward the Little and grandson of Edmund Ironside was proclaimed king after battle of Hastings but forced to yield to William the Conqueror joined in two unsuccessful expeditions against William in 1065-66 defeated Donaldson of Scot in 1097 and secured the throne for his nephew Eadwy

Edgeworth, Maria (1767-1849) Eng novelist besides stories for children she wrote *Castle Rackrent* (1800) *Belinda* (1801) and other novels

Edgeworth, Richard Lovell (1744-1817) Eng mechanical inventor and author in some degree anticipated McAdam in his Essay on the Construction of Roads and Bridges

Edinburgh, Alfred Ernest Albert, Duke of (1844-1900) Second son of Queen Victoria in 1895-96 commanded the Mediterranean Squadron declined the throne of Greece in 1892 became duke of Saxe-Coburg-Gotha in 1893

Edison, Thomas Alva (born 1847) Amer inventor 168

Edmund, or Eadmund, Saint (841-70) King of E Angles began to reign in 855 in 866 E Angles was invaded by the Danes under Hingwar who sent a messenger to Edmund bidding him renounce Christianity on refusal he was tied to a tree and his body pierced with arrows

Edmund I, the Magnificent (c1022-46) King of Eng succeeded Athelstan in 940 concluded a treaty with Olaf and Ragnar in 943 but expelled them in 944 reduced Mercia and in 945 formed an alliance with Malcolm of Scot assassinated by an outlaw

Edmund Ironside (981-1016) King of Eng son and successor of Athelred the Unready shared the kingdom with Canute who had defeated him owing to the

treachery of Edric Streona was assassinated

Edmunds, George Franklin (1828-1919) Amer politician and lawyer was responsible for Edmunds Act and Anti-Trust Law of 1890 (generally referred to as Sherman Act)

Eder (died 955) King of Eng succeeded his brother Eadmund in 946 overcame the Danes in Northumberland St Dunstan was his guide and friend

Efron, Mohammed (Abu Abdallah Pen Ldris) (1099-1164) Arabian geographer wrote in Arabic a geographical treatise explaining the large silver globe he made for Roger King of Sicily

Edward (1330-78) Prince of Wales called the Black Prince son of Edward III won the battle of Poitiers (1356) taking King John prisoner in 1367 undertook to remanate Pedro the Cruel of Castile on his throne and accomplished this object by the victory of Najera

Edward "the Confessor" (c1004-66) King of Eng son of Ethelred the Unready in 1062 Godwine of Wessex who had been outlawed rose in rebellion installed Stigand Archbishop of Canterbury and during the rest of the reign all real power was in the hands of the House of Godwine Edward codified the customary law of the Anglo-Saxons which thus became known as the laws of King Edward

Edward "the Elder" (870-924) King of the Anglo-Saxons son and successor (901) of Alfred the Great defeated the Danes of Northumbria and afterwards extended his sway over Northumbria Wales and Strathclyde first to assume title of King of Eng

Edward "the Martyr" (c1068-79) King of Eng succeeded his father Edgar in 975 opposed by his stepmother Elfrida who had him assassinated at Corfe Castle

Edward I (1239-1307) King of Eng succeeded his father Henry III in 1272 known as Longshanks he effected conquest of Wales and set to work to subdue Scot gained victory at Bannockburn (1298) executed Wallace (1305) but lost his life when marching against Bruce (1307) effected many reforms

Edward II (1284-1327) King of Eng succeeded his father Edward I in 1307 was of a luxurious and pleasure seeking disposition and his misgovernment and fondness for his favorites led to his deposition and imprisonment in Berkeley Castle where he was murdered in 1327 he was defeated by Bruce at Bannockburn

Edward III (1312-77) King of Eng succeeded his father Edward II in 1327 defeated Scots at Halidon Hill (1333) defeated the Fr at Crecy (1346) and captured Calais (1347) a capable monarch Edward encouraged the wool trade

Edward IV (1442-83) King of Eng son of Richard Duke of York after victory of Mortimer's Cross was crowned king (1461) defeated Lancastrians at Towton overcame Warwick at Barnet and won battle of Tewkesbury (1471)

Edward V (1470-83) King of Eng succeeded his father Edward IV but reigned only a few weeks being mothered in the Tower by order of his uncle Richard Duke of Gloucester afterwards Richard III

Edward VI (1537-53) King of Eng son of Henry VIII and Jane Seymour succeeded (1547) a learned youth but weak in body and probably in character during his reign a somewhat Calvinistic form of Protestantism was rigorously established throughout the kingdom

Edward VII (1841-1910) King of Eng eldest son of Queen Victoria and the Prince Consort (Albert of Saxe-Coburg-Gotha) succeeded in 1901 his reign was of a peaceful character and his efforts to maintain cordial relations with foreign rulers earned for him the name of Edward the Peacemaker 644, 645, 646, 647

Edward (born 1894) Prince of Wales, eldest son of George V and Queen Mary qualified for the navy in 1907, and proceeded to Osborne College, became undergraduate at Oxford Univ

(1912); was aide-de-camp to General French in Fr. in 1914, and served also in Eg.; since World War has visited U.S.A., Canada, Australia, N. Zealand, and Africa, and has also undertaken many public duties in Gt. Brit., frequently representing His Majesty George V.

Edward, Thomas (1814-84), Scot. naturalist; discovered several new species, and wrote "Selections from the Fauna of Banffshire," appended to his biography by Smiles (1876).

Edwards, Amelia Handford (1831-92), Eng. novelist and Egyptologist; novels include "Barbara's History" (1864), "Lord Brackenbury" (1880); founded Egypt Exploration Fund.

Edwards, John Passmore (1823-1911), Eng. journalist, politician, and philanthropist; owned the *Echo*, a former London evening newspaper; donated large sums of money to free libraries, hospitals, etc.; became M.P. in 1880.

Edwin or Eadwine (586-633), King of Northumbria; by the conquest of Bernicia founded the kingdom of Northumbria; converted to Christianity (627).

Edwy the Fair (939-959), King of the Anglo-Saxons; son of Edmund; succeeded his uncle, Eadred, in 955; in 957 the Mercians and Northumbrians revolted from him, and declared his younger brother, Edgar, King.

Edzchout, Gerbrand van den (1621-74), Flem. artist; pupil of Rembrandt; excelled in portraits; among his best works is "Christ among the Doctors."

Egbert (died 839), King of the Anglo-Saxons; became in 802 king of Wessex, to which he annexed Mercia (826) and Northumbria (827); in 828 he overran Wales, and in 835 defeated the Northmen.

Egg, Augustus Leopold (1816-63), Eng. artist; became R.A. (1860); excelled in historical incidents; works include "Sir Percie Shafton" and the "Dinner Scene from the Taming of the Shrew" (1860).

Egmont, Lamoral, Count of (1522-68), Flem. noble, statesman, and soldier; distinguished himself against the Fr. at St. Quentin and Gravelines; becoming obnoxious to Philip II, he was executed at Brussels by the Duke of Alva.

Ehrlich, Paul (born 1854), Ger. bacteriologist; discoverer of the drug salvarsan and founder of chemotherapy; shared Nobel prize (1908).

Eikhorn, Hermann von (1848-1918), Ger. general; successfully operated against the Rus. in World War; became dictator in the Ukraine, where he was assassinated.

Eikhorn, Johann Gottfried (1752-1827), Ger. Orientalist and theologian, professor of Oriental languages at Jena (1775) and Göttingen (1779); wrote "Introductions to the Old and New Testaments."

Eiilal, Alexandre Gustave (1832-1923), Fr. engineer, authority on aerodynamics; built the Garabit viaduct, Cantal (1882), the framework of the Statue of Liberty, New York harbour, and the famous Eiffel Tower, Paris (1889); was associated with scandals attending de Lesseps' dissensions attempt to construct a canal across Panama isthmus in 1883, and was imprisoned and fined.

Einhard, or Eginhard (c. 770-840), Frankish historian; sec. to Charlemagne; wrote the biography of Charlemagne, the finest example of the Middle Ages.

Einstein, Albert (born 1879), Ger.-Swiss scientist of Jew. parentage; formulated the theory of "relativity," regarded as the foremost scientific principle propounded since Newton's gravitation theory; the verification of his theory that a ray of light, passing near the sun on its journey to earth, would have its path appreciably bent, brought him additional fame; received the Nobel prize (1921).

Eisner, Kurt (1867-1919), Ger. socialist politician; a Galician Jew; his proper name was Salomon Kohnowky; was a prime mover in the overthrow of Bavarian monarchy and became first pres. of the republic; his efforts to effect separate peace with the Allies met with

disapproval of the reactionaries, and he was assassinated.

Edon, John Secc, 1st Earl of (1751-1836), Eng. lawyer; called to the bar (1776); entered parl. (1783); was Lord Chancellor from 1801 to 1807-27.

Edmon of Castile (died 1290), Queen of Eng., married Prince Edward, afterwards Edward I, in 1254.

Edmon of Guineus (1122-1204), Queen of Henry IX of Eng.; aided her sons in their rebellion against their father, and was imprisoned (1173-84).

Edmon of Provence (died 1291), Queen of Eng.; in 1236 married Henry III of Eng., and on his death, in 1272, took the veil.

Edgar, Sir Edward (born 1867), Eng. composer, the most brilliant of recent years; appointed Master of the King's Music (1924); among his best-known works are "Carotacus" (1898), "The Dream of Gerontius" (1900), "The Apostles" (1908), "The Kingdom" (1908).

Edin, Thomas Bruce, 7th Earl of (1766-1841), Brit. soldier and diplomatist; was 11th Earl of Kincardine; whilst ambassador in Constantinople (1799-1802), planned removal of the "Elgin Marbles" from Athens to Eng.

Edin, James Bruce, 8th Earl of, and 12th Earl of Kincardine (1811-83), Brit. diplomatist; governor of Canada (1846-54); negotiated Treaty of Tientsin (1858); went to India as viceroy (1862).

Edin, Visitor Bruce, 9th Earl of (1849-1917), Brit. statesman; became viceroy of India (1895) and was Colonial Sec. (1905-1908).

Elijah, Heb. prophet; denounced idolatry during the reigns of Ahab and his son (910-850 B.C.).

Ellet, Sir Charles Edgeworth (born 1864), Brit. administrator; held appointments at the embassies in Leningrad (1888-92), Constantinople (1893-9), and Washington (1898); became ambassador to Japan (1919).

Ellet, Charles William (born 1834), Amer. educationalist; prohibitionist and advocate of League of Nations and co-operation between capital and labour; pres. of Harvard Univ. (1889-1909).

Ellet, George, pseudonym of Mary Ann Evans, novelist (1819-80); 1063.

Ellet, Sir John (1592-1632), Brit. statesman and patriot; entered parl. (1623); opposed arbitrary govt. of Charles I. and was imprisoned in the Tower (1629), where he died.

Elisha, Heb. prophet, the successor and pupil of Elijah; died about 859 B.C.

Elizabeth (1533-1603), Queen of Eng.; 1816.

Elizabeth (1837-98), Empress of Austria; daughter of Maximilian I and wife of Francis Joseph; fatally stabbed by anarchist at Geneva.

Elizabeth (1848-1916), Queen of Rumania. See Carmen Sylva.

Elizabeth (born 1876), Queen of the Belg.; former princess of Bavaria; married to Albert I, king of the Belg. (1900).

Elizabeth Petrovna (1709-61), Empress of Rus.; daughter of Peter the Great; seized throne in 1741, and ruled with ability.

Elizabeth Stuart (1596-1662), Queen of Bohemia; daughter of James I of Eng.; married Frederick V, Elector Palatine (1613), and shared his fortunes.

Elizabeth Woodville (c. 1437-92), Queen of Eng.; daughter of Sir Richard Woodville, afterwards Earl Rivers; after death of her first husband, Sir John Grey, was married to Edward IV.

Elizabeth (1607-31), Princess and saint of Hungary, daughter of Andreas II; in 1521 married Louis, Landgrave of Thuringia; canonized by Gregory IX.

Elizabeth (1486-1603), Queen of Eng.; daughter of Edward IV; was married to Henry VII (1486), thereby reconciling the rival claims of the houses of York and Lancaster.

Edinburgh, Edward Law, Baron (1750-1818), Eng. lawyer; defended Warren Hastings (1787-94); became Attorney-General (1801); made Chief Justice of the King's Bench, and raised to peerage (1802).

Edinburgh, Edward Law, Earl of (1790-1871), eldest son of preceding; Pres. of Board of Control in 1829, 1834, 1841,

and 1868; appointed Governor-General of India (1842); annexed Sind; terminated first Chinese war; First Lord of the Admiralty (1846-47).

Elkman, John (1791-1868), Eng. physician; distinguished in therapeutics; his belief in mesmerism led to his professional fall.

Elkott, Ebenezer (1781-1849), Eng. poet, called the "Corn-Law Rhyme"; first attracted notice by the "Corn Law Rhymes" (1827); also wrote "Village Patriarch."

Elkott, Maxine (born 1873), Amer. actress; frequently appeared in Eng.; took part in *The Two Gentlemen of Verona*, *Twelfth Night*, *A Midsummer Night's Dream*, etc.; was proprietor of a New York theatre from 1908; sister-in-law of Sir Johnston Forbes-Robertson.

Elkington, Robert William (1774-1831), popular Eng. comedian; regarded as one of the leading actors of his time.

Ellwood, Thomas (1639-1718), Eng. Quaker; friend of Milton, to whom he is said to have suggested the idea of writing "Paradise Regained," 616; picture, 614.

Elman, Mischa (born 1891), Rus. violinist and composer; has appeared in various European cities, including Leningrad and Berlin, and in New York and London.

Elphinstone, Mountstuart (1779-1859), Brit. administrator; distinguished himself in the Marhatta war; Lieutenant-governor of Bombay (1820-27); wrote "An Account of the Kingdom of Cabul" (1815).

Elyot, Sir Thomas (c. 1490-1546), Eng. diplomat and scholar; his work "Book Named the Governor," was written to guide men destined to secure high places.

Elzevir, Name of famous family of printers, the first of whom, Louis (1540-1617), established his press at Leyden; the press at Amsterdam was founded by his great-grandson, Louis (born 1604), and here the well-known series of classics was issued (1655); Abraham (died 1712) was the last of the family.

Emerson, Ralph Waldo (1803-82), Amer. author, Unitarian minister from 1802-32; came to Europe in 1833, visited Fr., It., and Eng., and met Coleridge, Wordsworth, and Carlyle; from 1835 to his death he remained quietly at his New England home, engaged in writing and country pursuits, except for another visit to Eng. and Fr. (1847-48); in 1836 founded Transcendental Club, and after 1840 contributed to the *Dial*, the organ of the Transcendentalists; besides his numerous essays, he wrote "Nature" (1836), "English Traits" (1856), the "Conduct of Life" (1860), etc.; at one time a prominent abolitionist.

Emery, Winifred (1840-1924), Eng. actress; acted at many London theatres in company with Henry Irving, Forbes-Robertson, and Beerholm Tree; first appeared in London, when 15 years old, at Princess's Theatre; was wife of Cyril Maude.

Emis Pasha (1840-92), Ger. African explorer; in 1878 was made ruler of the Equatorial province, and held his ground against the Mahdi; in 1886 Stanley went to his relief; was murdered by Arabs.

Eminescu, Mihail (1849-89), Rumanian poet; regarded as foremost lyrical poet of his country.

Emma (born 1658), Queen of the Netherlands; wife of William III and mother of Queen Wilhelmina; was regent from 1690-98.

Emmanuel Philibert (1523-80), Duke of Savoy; son of Charles III; on his father's death, the Fr. seized most of his inheritance; appointed governor of the Netherlands by Philip II in 1566, he defeated the Fr. at St. Quentin, and by the Treaty of Cateau-Cambrésis (1559) recovered his ancestral domains.

Emmet, Robert (1778-1803), Irish revolutionist; expelled from Dublin Univ. in 1799 owing to his anti-Eng. sympathies; in 1803 led an unsuccessful attack on Dublin Castle.

Emmott, Alfred, 1st Baron (born 1859), Brit. politician; entered parl. (1899); Chairman of Ways and Means (1906-11); raised to peerage and became Under-Sec. for the Colonies (1911); First Commissioner of Works (1914-16);

EMPEDOCLES

EUHEMERUS

- Director of War Trade Department (1915-19)
- Empedocles** (c. 490-430 B.C.) Gk. philosopher and poet, committed suicide by plunging into Mount Etna, wrote tragedies, political tracts and poems on Medicine, Nature and Purifications
- Enoch**, or **Enos**, **Juan de** (c. 1408-1434) Sp. dramatist and musician became master of Leo X's Chapel first Sp. writer of the secular drama
- Encke, Johann Franz** (1791-1865) Ger. astronomer, director of Berlin observatory (1825) it is Encke who discovered the comet which bears his name
- Enfantin**, **Barthélemy Prosper** (1798-1864) Fr. Socialist reformer wrote *Doctrines of St. Simon* (1839) *Economie Politique* and *La Vie Éternelle* *Parade Présente et Future*
- Engels, Friedrich** (1820-95) Ger. Socialist friend of Karl Marx with whom he was associated in the communist manifesto of 1847 helped to found the International Working Men's Association (the International) (1864) wrote the Condition of the Working Classes in Eng. land etc.
- Ennius**, **Quintus** (239-169 B.C.) early Latin poet favourite of the Romans his epic poem *The Annals* embodied the traditions and history of Rome to his own day
- Entenzauxaux**, **Joseph Antoine Bruni d'** (1739-93) Fr. admiral and navigator headed the unsuccessful search for La Perouse in 1788 visiting N.W. Holland and Van Diemen's Land
- Ezer**, **Pasha** (1879-1923) Turk. politician and soldier a leading spirit of the Young Turk movement he helped to depose Abdul Hamid (1908) advised Turkey's taking up arms in the World War did fighting at Boshara
- Éon de Beaumont, Charles** (1717-1810) Fr. diplomatist aided Louis XV in his secret diplomacy carrying out many of his missions in the disguise of a woman falling into disfavour he spent most of his later life in Eng.
- Ephraïm**, **Isaiah** (c. 440-360 B.C.) Chaldean general by his wise policy and military skill raised his country to the first place in Greece
- Ephorus** (440-360 B.C.) Gk. philosopher and poet, disciple of Pythagoras composed the first Doric comedies
- Epictetus**, Stoic philosopher of the 1st cent. A.D. was bought as a slave by Paphroditus and, when emancipated, became a teacher at Nicopolis in Greece his lectures presenting a high tone of ancient morality were transcribed by his pupil Arrian
- Epicurus** (c. 340-270 B.C.) Gk. philosopher was founder of the Epicurean school which holds that the *summum bonum* consists in pleasure—chiefly mental pleasure
- Epstein**, **Joseph** (born 1880) Eng. sculptor born in N.Y. a realist and extremist he was a student of Rodin whose influence is seen in some of his works prominent among which are the figures on the Brit. Medical Assoc. building in the Strand the tomb of Oscar Wilde and busts of Admiral Lord Fisher and the Duchess of Hamilton his sculptures have at various times been the subject of much controversy
- Erasmus**, **Desiderius** (1466-1536) Dutch scholar and critic one of the greatest scholars of the Renaissance coming to Eng. he settled at Oxford where he studied divinity under Colet and Gik under Grocyn and Linacre reviving Eng. in 1509 he was made Margaret professor of divinity and professor of Gik at Cambridge he returned to the Continent settling at Basel where he published his edition of the New Testament Erasmus was a favoured moderate reform in the Church his Christian and Enchiridion Morale but he gave little support to Luther
- Eratosthenes** (c. 276-194 B.C.) Gk. mathematician took charge of the library at Alexandria determined the size of the earth according to the modern system
- Erdmann-Chatrain**, name adopted by the collaborators Émile Erdmann (1822-90) and Alexandre Chatrain (1826-90) Fr. novelists authors of *L'Ami Fritz* (1864) *L'Histoire d'un Concert de 1813* (1864) etc.
- Erik XIV** (1593-77) King of Sweden succeeded (1593) was deposed by his brothers John and Charles in 1599 imprisoned and died of poison
- Eriksen**, or **Eriksen**, **Leif**, Norse adventurer flourished in 11th cent. said to have discovered N. Amer.
- Eriksson, John** (1803-89) Swedish engineer inventor of the atmospheric engine came to Eng. in 1826 and in 1831 exhibited the calorific engine perfected in the Ericsson built in 1851 in N.Y. in 1839 constructed the *Princeton* in which the screw was for the first time applied to steam navigation
- Erlanger**, **Emile Beaumont, Baron d'** (born 1866) Brit. financier born in Paris he became a naturalized Englishman (1891) senior partner in the financial house of F. Erlanger and Co.
- Ernest Augustus** (1771-1841) King of Hanover and Duke of Cumberland 5th son of George III. succeeded to the crown of Hanover (1837)
- Ernst**, **Rowland Prothero**, **Baron** (born 1845) Brit. politician and author entered parli. (1874) was Pres. of Board of Trade (1916-19) when he was raised to peerage wrote *English Farming Past and Present* *The Problem in Human Life* etc.
- Ernst**, **Heinrich Wilhelm** (1814-65) Ger. violinist and composer played 200
- Erskine**, **John**, of **Dun** (1609-91) Scot. scholar and reformer Knox found a home at his castle actively promoted the Reformation though not ordained was more than once moderator of the general assembly
- Erskine (Thomas)**, 1st **Baron** (1750-1823) Eng. lawyer son of the tenth Earl of Buchan entered the bar (1778) he won renown by his defence of Lord Keppel and of Lord George Gordon was attorney general to the Prince of Wales and in 1806 became Chancellor under Fox and was raised to the peerage
- Erzberger**, **Matthias** (1875-1921) Ger. statesman leader of the Democratic Socialist Party in the Reichstag he followed Bethmann-Hollweg as Sec. of State (1918) and became Finance Minister (1919) he negotiated the armistice that brought the World War to an end met his death by assassination
- Esher** (Reginald Brett), 2nd **Viccount** (born 1832) Brit. politician and writer was member of the S. African War Commission edited the *Letters of Queen Victoria* and wrote *Footprints of Statesmen* *Today and Tomorrow* and *Other Essays*
- Esmond**, **Henry Vernon** (born 1869) Eng. actor and playwright proper name Henry Vernon Jack plays include *The Divided Way* *Under the Greenwood Tree* *Three Wise Fools*
- Espartaco**, **Joaquín Baldomero** (1792-1879) Sp. soldier was appointed regent (1841) but driven from the country during an insurrection (1843) returning formed a coalition ministry (1854)
- Espey, Louis**, **Franchet d'** (born 1856) See **D'Espérey**, **Louis Franchet**
- Espronceda**, **José de** (1810-42) Sp. poet and politician as a member of a secret society was imprisoned in the convent of Guadalupe and there began his epic poem *El Pelago* banished to Cuellar he wrote his romance *Don Sancho Saldaña* his writings were greatly influenced by Byron
- Emad Pasha** (1863-1920) Turk. soldier and bandit became provisional pres. of Albania (1914) assassinated in Paris
- Essen**, **Hans Henrik**, **Count** (1755-1824) Swedish general councillor of state (1809) conducted successful campaign against Norway (1813) later appointed field marshal and governor of Norway
- Essex** (Robert Devereux), 2nd **Earl of** (1567-1601) Eng. soldier and courtier distinguished himself at Zutphen (1586) on death of Leicester became Elizabeth's favourite, led an unsuccessful expedition to Sp. (1597) appointed Lord Lieutenant of Ire. but met with ill success 1613
- Essex** (Robert Devereux), 3rd **Earl of** (1591-1646) Eng. soldier son of preceding, distinguished himself in Holland under Prince of Orange became vice admiral in the Eng. navy victorious at Edgehill and elsewhere
- Eske**, **House of**, princely family of it, whose origin is traced back to the Longo bard period though the name of Eske was not assumed till the 10th cent.
- Esterházy**, noble and illustrious Hungarian family which traces its descent from Paul d'Esterházy who was baptized in the 10th cent. and was a descendant of Attila
- Estlin** (c. 552-616) King of Kent son of Formeric whom he succeeded in 560 was defeated by Ceawlin King of Wessex became Bretwalda (593) after the landing of Augustine was baptised in 597
- Etheldreda**, St. (St. Audrey) (c. 630-79) Queen of Egfrid King of Northumbria founded the conventual church afterwards the cath. of Ely which is dedicated to St. Etheldreda and St. Peter
- Etheldreda** (died c. 917) daughter of Alfred the Great wife of Ethelred Earl of Mercia became ruler of Mercia on husband's death
- Ethelred**, or **Ethelrith** (died 617) King of Northumbria succeeded his father Eboric King of Bernicia (593) and conquered Deira thus forming the kingdom of Northumbria
- Ethelred I** (died 871) King of Wessex and Kent 4th son of Ethelwulf succeeded (866) in conjunction with his brother Alfred he several times defeated the Danes
- Ethelred II** (968-1016) King of the Eng. son of Edgar and Elftrida succeeded (984) called The Unready cruel and licentious driven from Eng. by Swend (1013) he returned the following year
- Ethelwulf** (died 858) King of Wessex succeeded (839) fought successfully against the Danes and Welsh forced to cede greater part of his kingdom to his son Ithelbald
- Ethelwold**, St. **George** (1034-91) Eng. dramatist wrote *The Cornish Revenge* or *Love in a Tub* (1664) *She Would if She Could* (1667) and *The Man of Mode* or *St. Ruyter's Plaster* (1676)
- Etty**, **William** (1787-1849) Eng. artist elected R.A. (1828) among his best pictures are *Judith* *The Judgment of Paris* and *Venus Attired by the Graces*
- Eucken**, **Rudolf Christoph** (born 1844) Ger. philosopher won Nobel prize for literature (1908) wrote *Meaning and Value of Life*
- Euklid of Alexandria** celebrated geometrician little is known of his life according to Proclus he lived from 325 to 283 B.C. and was one of the Platonic school said to have written other works besides the *Elements of Geometry*
- Euklid of Megara** (died c. 374 B.C.) Gk. philosopher disciple and friend of Socrates after whose death he established his school at Megara
- Eugène**, **François** (1663-1736) Prince of Savoy distinguished himself fighting for Austria joined Marlborough in 1704 taking part in the battle of Blenheim was defeated at Cassano (1705) but soon afterwards gained a victory and relieved Turin in 1708 joined Marlborough in Flanders and was present at the battles of Oudenarde and Malplaquet
- Eugene** (1826-1920) Empress of the French 55
- Eugenius III** (died 1153) Pope elected (1145) under his pontificate the Romans rose against the temporal power of the Pope
- Eugenius IV** (died 1447) Pope elected (1431) opposed the Council of Basel (1437) and caused the great schism of the 15th cent. within the pale of the Rom. Church
- Euhemerus** or **Evemerus**, Gk. philosopher and writer about 300 B.C. discovered monumental inscriptions on island of Paros on which he based his sacred

EURIPIDES

History," giving a rational explanation of GK myths

Euripides (480-406 B.C.), GK tragedian, rival and contemporary of Sophocles, sought in Macedonia a refuge from the satire of Aristophanes, among his works are the "Alcestis," "Hecuba," and "Medea"

Eusebius, Pamphilus (c. 284-340), Bishop of Caesarea, in Palestine, attended the Council of Nicea (325), and drew up the first draft of the creed, his most important work is the "Historia Ecclesiastica"

Eutyches (died c. 456) presbyter and archimandrite at Constantinople, opposed Nestorians, maintained that the human body of Christ was only apparent

Evans, Sir Arthur John (born 1851), Eng. archaeologist, discoverer of pre-Phoenician script in Crete

Evans, Edgar (died 1912), member of Captain Scott's ill-fated Antarctic expedition, 12, 16.

Evans, Edward Radcliffe (born 1881), Eng. sailor, commanded the Antarctic expedition, in which Scott lost his life, after latter died

Evans, Sir Frederick John Owen (1815-85), Eng. hydrographer was one of the Brit. delegates at the International Conference held at Washington (1885) to fix a prime meridian and universal day

Evans, Sir George de Lacy (1787-1870), Brit. general born in Ire, present at Quatre Bras and Waterloo. M.P. from 1833 to 1841 and 1846 to 1865, headed the Brit. Legion sent to Sp. (1835), to assist queen regent distinguished himself in the Crimean War

Evans, Sir John (1823-1908), Eng. archaeologist pres. of the Numismatic Soc., Geological Soc. and Soc. of Antiquaries, wrote "Coins of the Ancient Britons" (1864) and "The Ancient Stone Implements of Great Britain" (1872)

Evans, Mary Ann See Eliot, George.

Evans, Robley Dunglison (1846-1912), Amer. sailor, known as Fighting Bob Evans, became commander of the Atlantic Fleet (1905)

Evans, Sir Samuel (1859-1918) Brit. politician and lawyer, solicitor general (1908-10), appointed pres. of Probate, Divorce and Admiralty Courts (1910)

Evans-Thames, Sir Hugh (born 1862), Brit. sailor, fought at Fuhad (1916)

Evelyn, John (1620-1702), Eng. author and diarist, resided in Fr. and It. (1643-1647), in 1652 settled at Baynes Court, near Deptford and, notwithstanding his Royalist opinions, lived unmolested in 1700 he removed to Wotton his birth place, his chief works are "Sylva" and his "Diary"

Everest, Sir George (1790-1866), Eng. engineer and surveyor, his chief work was the surveying of the northern part of the great Meridional Arc of India, 11 degrees in length, his name is perpetuated in Mount Everest

Everett, Edward (1794-1863), Amer. author and statesman, became Sec. of State (1852), and was elected to the Senate (1853), wrote the "Durge of Alaric the Vengoth" (a poem), Lives of Washington and General Stark

Evershay (Charles Shaw Lafeyre), Viscount (1794-1888), Brit. lawyer and politician, called to the bar (1819), entered Parl. (1830), was elected speaker in 1839, and held the office till 1857, when he was raised to the peerage

Evershay (George Shaw Lafeyre), 1st Baron (born 1832), Brit. politician, 1st Commr. of Works (1881-83), Postmaster-General (1883-84), Pres. of Local Gov. Board (1894-95), raised to peerage (1919)

Ewald George Rudolph August von (1803-75), Ger. Orientalist and theologian, professor of philosophy and of Oriental languages at Göttingen, dismissed (1837), returned in 1848, but lost again his professorship in 1867, owing to his refusal to take the oath of allegiance to the King of Prussia

Exmouth (Edward Pellew), 1st Viscount (1757-1833) Eng. admiral, served in the wars with Amer. and Fr. was afterwards appointed to the command of the

E. Indian station, in 1814 he bombarded Algiers

Eyck, Hubert van (c. 1366-1426), Flem. painter painted the greater part of an altar-piece, the "Adoration of the Lamb," for the cath. of St. Bavon at Ghent, shares with his brother Jan the reputation of the discovery of oil painting, with him he founded the Flem. school of painting

Eyck, Jan van (c. 1390-1441), Flem. painter, brother of preceding, whom he assisted in his altar-piece, the "Adoration of the Lamb," in the cath. of St. Bavon, at Ghent, his "John the Baptist and His Wife" is in the National Gallery, London

Eyre, Edward John (1815-1901), Eng. explorer and administrator 1269.

Eyre, Sir James (1781-99), Eng. lawyer, appointed recorder of London (1763), Baron of the Exchequer in 1772, and Chief Justice of the Common Pleas (1793), presided at the trials of Hardy, Tooke and Thelwall

Eyre, Sir Vincent (1811-81), Brit. soldier, in the defence of Cabul, during the Afghan insurrection of 1841, offered himself his wife and child, as hostages to Akbar Khan, distinguished himself in the relief of Lucknow

Faber, Frederick William (1814-63), Eng. divine and poet, joined the R.C. (church (1840), founded the Oratory of the Brotherhood of St. Philip Neri at Brompton (1849), his theological works attracted great attention

Fabius (Quintus Fabius Maximus) (died 201 B.C.) Rom. general, surnamed Cunctator ("dilettante") because, entrusted with defence of It. against victorious Hannibal, he pursued a course of cautious and patient generalship, and gradually wearied him out

Fabre, Jean Henri (1823-1915), Fr. entomologist and author 47.

Faguet, Louis (1817-1916) Fr. critic and writer, was professor of poetry at the Univ. of Paris

Fahrenheit, Gabriel Daniel (1686-1736), Fr. experimental philosopher, first to use quicksilver instead of spirits or wine in construction of thermometers

Fairbairn, Sir William, Bart. (1789-1874), Scot. engineer, invented the rectangular self-supporting tubular bridge

Fairfax, Thomas Lord (1612-1671), Eng. Parl. general, having won renown at Marston Moor and Naseby, was appointed general of the Parl. forces (1646) after Cromwell's death took part in the restoration movement, holding back in the king's name, and crowing over to the Hague (1660) as head of the commission to arrange for Charles II's return

Falkenhayn, Erich von (born 1861), Ger. general, became chief of general staff of Ger. army in succession to von Moltke in 1914, but was superseded (1918) after the Verdun failure, later was successful against Rumanians, but failed when in command against the Brit. in Palestine and Mesopotamia

Falkland, Marcus Cary, 2nd Viscount (1610-43), Brit. statesman and general in 1639 accompanied Essex's expedition against the Scots, in the following year he was returned to Parl., early distinguished himself, and in 1642 accepted the secretaryship of State, fought valiantly on the Royalist side at Edgehill, and at the siege of Gloucester, killed at the battle of Newbury

Falkland, Clement Armand (born 1841) Fr. statesman and barrister, Minister of the Interior (1882, 1887, 1889), of Justice (1887), of Education (1883-85), Pres. of Council (1883) Pres. of Republic (1906-13)

Faraday, Michael (1791-1867), Eng. chemist and physicist, 207.

Farjeon, Benjamin Leopold (1833-1903), Eng. novelist, works include "Griff," "Aaron the Jew," "Shadows of the Snow," "Devlin the Barber"

Farnese, Alessandro, Duke of Parma (1746-92), It. soldier, fought at Lepanto (1771), as governor of the Sp. Netherlands

FERDINAND

captured Antwerp for Philip II (1585), and five years later compelled Henry IV of France to raise the siege of Paris

Farnol, John Jeffrey (born 1878), Eng. novelist, his works include "The Amateur Gentleman," "The Broad Highway," "Beltane the Smith," "Black Bartlemy's Treasure"

Farragut, David Glasgow (1801-70), Amer. admiral, captured New Orleans in Amer. Civil War, in 1864 was sent to Mobile Bay, the harbour of the enemy's blockade runners, which he closed

Farrer, Frederic William (1831-1909), Eng. divine and scholar, headmaster of Marlborough (1871-76), archdeacon of Westminster (1883), dean of Canterbury (1895), his "Life of Christ" appeared in 1874, "Life of St. Paul" (1879), and "Lives of the Fathers" (1889)

Farrer, Ellen (Nellie) (1848-1904), Eng. actress, won great fame in burlesque comedy and farce in London

Fauve, François Félix (1841-99) Fr. statesman, became Minister of Marine in 1894 was Pres. of the Republic from 1895 until his death

Faust, Johann. See Faust, Johann.

Faust, Johann (18th cent.) Ger. scholar dealer in the black art, studied medicine and magic at Cracow the hero of much legendary, dramatic, and poetical literature

Fawcett, Henry (1833-84) Eng. economist and statesman though blinded in 1858, the publication of his "Manual of Political Economy" (1863) was followed by his election to the chair of Political Economy at Cambridge entered Parl. (1865), was Postmaster-General (1880-5) introduced several postal reforms

Fawcett, Milnes (born 1847) Eng. writer and economist wife of Henry Fawcett, advocate of woman suffrage wrote "Political Economy for Beginners," "Life of Queen Victoria," and "Women's Suffrage"

Fawkes, Guy (1570-1606) Eng. conspirator, served with the Spaniards in Flanders (1596-1600) and was present at the taking of Alcazar (1598) as chief agent in the Gunpowder Plot arrested and executed

Fayolle, Marie Emile (born 1842) Fr. soldier, was in command of 1st force, at the Somme offensive (1916), and later commanded central armies (1917) and then northern group (1918), appointed marshal (1921)

Felkenham, John (c. 1515-84), last Abbot of Westminster to which office he was appointed in 1556

Faisal (born 1885), king of Irak took an active part in the Young Turk movement, commanded N. Arabian forces in World War, crowned king of Irak (1921)

Felix I (died 274), Pope, succeeded Dionysius (268)

Felix II (died 365), Pope (consecrated 353)

Felix III (died 492), Pope, succeeded Simplicius (483)

Felix IV (died 530), Pope, successor of John I (526)

Felix V (1383-1451), Pope (1439-49) reigned as Amadeus, Duke of Savoy (1416-34)

Fénelon, François de Saligne de la Mothe (1651-1715) Fr. divine in 1688 was appointed preceptor of the young Duke of Burgundy, became archbishop of Cambrai (1695) his favour with Louis XIV. came to an end in 1698 with the appearance of "Les Aventures de Télémaque," the publication of which was due to fraud, his works deal with philosophy, history, and literature, in addition to theology

Fenn, George Manville (1831-1909), Eng. author wrote numerous popular stories for boys, among them being "Nat the Naturalist," "Off to the Wilds," "A Crimson Crime"

Ferdinand I (1793-1875), Emperor of Austria eldest son of Francis I, succeeded (1835), having been crowned king of Hungary (1830) resigned in favour of his nephew, Francis Joseph I (1848), Ferdinand I (born 1861) King of Bulgaria, chosen to succeed Alexander as Prince

FERDINAND

of Bulgaria (1887) proclaimed himself Tsar (1898) abdicated (1918)

Ferdinand I (died 1905), the Great King of Castile and Leon and Galicia disputed with Henry III of Castile for the imperial crown

Ferdinand II (died 1188) King of Galicia and Leon succeeded Alfonso VIII (1157)

Ferdinand III (1199-1252) King of Castile and Leon called the Saint became King of Castile (1217) and of Leon (1230) among his achievements against the Moors was the capture of Cordova (1236) and Seville (1248)

Ferdinand IV (1285-1312) King of Castile son of Sancho IV took Gibraltar and other positions from the Moors

Ferdinand V (1452-1516) King of Castile (the Catholic) the 2nd of Aragon and Sicily and 3rd of Naples was son of John II of Navarre and Aragon by his marriage (1469) with Isabella of Castile he united the two kingdoms in 1512 became ruler of Sp from Gibraltar to the Pyrenees

Ferdinand VI (1713-59) King of Sp son of Philip V succeeded (1746)

Ferdinand VII (1784-1833) King of Sp was the son of Charles IV of Sp whom he succeeded (1808) deposed in the same year by Napoleon who restored him to the throne (1814) during his reign the Amer colonies seceded

Ferdinand I (1503-64) Emperor of Ger son of Philip I engaged in a long war with John Apolya who was supported by the Turks for the possession of Hungary till in 1538 the country was shared between the two claimants when war broke out again (1540) Ferdinand bought off the Turks by a yearly tribute

Ferdinand II (1578-1637) Emperor of Ger grandson of Ferdinand I succeeded to the throne of Bohemia (1617) to that of Hungary (1618) elected emperor of Ger (1618) his reign chiefly occupied by the events of the Thirty Years War

Ferdinand III (1608-77) Emperor of Ger succeeded Ferdinand II (1637) having been King of Bohemia (1625) and of Hungary (1627) continued the hostilities begun by his father until 1648

Ferdinand or Ferrante I (1431-1494) King of Naples son of Alfonso V chief events of his reign were his quarrels with the Rom court and the internal rebellions of his barons (1485)

Ferdinand II (1469-98) King of Naples succeeded his father Alfonso II (1495) when the kingdom fell into the hands of Charles VIII and the Fr reconquered it (1498)

Ferdinand I (born 1465) King of Rumina succeeded his uncle Charles (1514) married (1591) Marie daughter of the Duke of Savoy and Gothia and cousin of George V of Eng

Ferdinand I (1751-1825) King of the Two Sicilies succeeded (1759) when Don Carlos died from the throne of Naples to that of Sp after Napoleon's victory at Austerlitz Ferdinand and his family fled to Sicily but returned (1815)

Ferdinand II (1810-59) King of the Two Sicilies eldest son of Francis I his tyrannical rule became little more than a series of crimes suppressed by blood shed

Ferdinand III (1709-1824) Grand Duke of Tuscany succeeded his father Leopold (1790) joined coalition against the Fr republic (1793) resumed friendly relations with Fr (1795) but was forced into an alliance with Austria (1799) compelled to formally renounce his kingdom (1801) he returned in 1814

Ferrer, Francisco (1859-1909) Span revolutionary was shot for taking leading part in insurrection (1909)

Ferry, Jules François Camille (1832-99) Fr statesman entered Chamber of Deputies (1869) on the fall of Napoleon III became a prominent member of the National Defence Committee became minister of Public Instruction (1879) formed a cabinet of his own (1880) and was minister of Finance (1890)

Fichte, Johann Gottlieb (1762-1814) Ger philosopher published in 1792 his Critique of all Revelation in which he

expounds on Kantian lines the relation of religion to morality in 1793 was appointed extraordinary professor of philosophy at Jena in 1810 became a professor at University of Berlin and in 1811 rector the exclusively moral attitude of his first works gave place to a more religious view

Fild, Cyrus West (1819-92) Amer merchant instrumental in laying Atlantic cable

Fiellding, Henry (1707-54) Eng novelist dramatist and political writer in 1742 appeared his *Adventures of Joseph Andrews* followed by *A Journey from this World to the Next* *The History of Jonathan Wild* *Tom Jones* and *Amelia*

Fildes, Sir Luke (born 1844) Eng figure painter became R.A. (1887) *The Doctor* and *The Return of the Penitent* are among his greatest works

Finlay, Robert Bannatyne 1st Viscount (born 1842) Brit politician and lawyer entered Parl (1886) Solicitor General (1895-1900) Attorney General (1900-6) Lord Chancellor (1916-18)

Finzen, Niels (1861-1904) Danish scientist 1884

Fisher, Andrew (born 1862) Australian statesman became Prime Minister (1910) and again (1914)

Fisher, Herbert Albert Laurens (born 1865) Brit politician and historian became Pres of Board of Education (1916) and author of *Medieval Empire* and *Napoleon*

Fisher, Sir Norman Warren (born 1879) Brit civil servant appointed chairman of Board of Inland Revenue in 1918 he became permanent Sec of the Treasury (1919)

Fisher of Kilverstone, John, 1st Baron (1841-1920) Brit admiral 1865, 89

Fish, John (1743-98) builder of first steamboat in Amer 1790

Fitzgerald, Edward (1809-1883) Eng poet and translator his version of Omar Khayyam is now an Eng classic

Fitzroy, Robert (1805-65) Brit admiral and meteorologist commanded the *Hecate* in the Darwin expedition to Amer (1831) established a valuable system of storm signals

Flammarion, Camille (born 1842) Fr astronomer and scientist 1875

Flamsteed, John (1646-1719) Eng astronomer appointed astronomical observer to the king (1675) compiled the first reliable catalogue of the fixed stars

Flaubert, Gustave (1821-80) Fr novelist his masterpiece *Madame Bovary* led to his unsuccessful prosecution in 1856 by the government who regarded it as an immoral and anti-religious work *Salammbo* appeared in 1866 and *La Tentation de St Antoine* in 1874

Flaxman, John (1755-1826) Eng classical sculptor employed by the Wedgwoods became R.A. in 1800 and professor of sculpture to the Academy in 1810 his works include monuments in St Paul's to Reynolds Howe and Nelson

Fleming, John Ambrose (born 1849) Eng engineer and physicist became professor of electrical engineering in Univ of London (1910) invented the thermionic valve

Fletcher, John (1579-1625) Eng dramatist and poet 1605

Flinders, Matthew (1774-1814) Brit navigator went to Australia in 1795 and discovered Bass Strait he surveyed the coast of New Holland and on his return voyage (1803) was captured by the Fr and imprisoned for six years his *Voyage to Terra Australis* was published in 1814

Foah, Ferdinand (born 1851) Fr soldier 1881 with Lloyd George picture 708

Fokker, A. H. G. (born 1890) Dutch inventor built the Fokker aeroplane used in the World War

Foote, Samuel (1720-77) Eng comedian dramatist actor and humorist at first unsuccessful as an actor in 1747 he began to give imitations of the principal actors and other celebrities of the day and at once found himself famous among his comedies are *The Mayor of Garratt* and *The Fair*

Forbes, Archibald (1748-1800), Scot war

FRAMPTON

correspondent during the siege of Paris (1871) he corresponded for the *Daily News*, and represented the same paper in the Carlist and Russo Turkish wars, was present at Ulundi riding 110 miles in fifteen hours in order to be the first to transmit the news of the victory in Zululand to Eng

Forbes, Jean Rossie (born 1803) Eng explorer travelled in China Africa and other countries wrote *Secret of the Sahara Kufara and Quest*

Forbes-Robertson, Sir Johnston (born 1853), Eng actor acted with Ellen Terry, the Bancrofts Henry Irving and Hare and taking up management played the lead in *Hamlet* *The Light that Failed* and *The Passing of the Third Floor Back*

Ford, Edward Osmon (1852-1901) Eng sculptor became R.A. (1886) his works include Mr Irving as Hamlet (1883) and the Queen Victoria Memorial Manchester (1901)

Ford, Henry (born 1863) Amer motor car manufacturer 17

Forster, John (1812-76) Eng biographer and journalist succeeded Dickens (1846) as editor of the *Daily News* but transferred his services to the *Examiner* which he edited (1847-56) wrote *Life of Sir John Eliot* (1864) *Goldsmith* (1848) *Walker Savage* (1869) and *Life of Dickens* (1871-4)

Forster, William Edward (1818-86) Brit statesman under Sec for the Colonies (1865-8) and became a member of the Cabinet (1870) Ir Sec (1880-82) he was responsible for the Education Act of 1870

Forster, Sir George Eulas (born 1847), Canadian statesman minister of Marine and Fisheries (1885-8) of Finance (1889-90) of Trade and Commerce (1911-21) Chief of the Can delegation in League of Nations assembly at Geneva (1920)

Forster, Sir Michael (1886-1907) Eng physiologist in 1870 became professor in physiology at Trinity College Cambridge and in 1883 first professor of physiology at the University, wrote a *Primer of Physiology* etc

Foster, Wylie Birket (1825-99) Eng draughtsman and water colour painter illustrated Longfellow's *Evangeline*, Goldsmith's poems and other works

Foucault, Joseph (1783-1820) Fr revolutionist and politician chief of police under Napoleon I minister of police under Louis XVIII

Fouquier-Tenaille, Antoine Quentin (1747-95) Fr revolutionist public prosecutor to the revolutionary tribunal (1793), was himself a victim of the guillotine

Fournier, François Charles Marie (1772-1837) Fr socialist and philosopher, one of the first writers to observe the benefits resulting from co-operation, from wholesale over retail dealing and from machinery

Fowler, Sir John (1817-86) Eng civil engineer was engineer for the construction of the Metropolitan and District Rlys and the Severn Valley Rly

Fox, Charles James (1749-1806) Brit statesman was a younger son of Henry Fox Lord Holland he entered Parl at the age of nineteen and became a lord of the Admiralty and was in 1778 nominated Lord of the Treasury on the collapse of the Shelburne administration

in 1783 he entered into a coalition with Lord North the ministry thus formed was defeated on Fox's India Bill owing to the machinations of George III who disliked him his name was struck off the list of privy councillors some years later and in 1797 he retired from parl life on Pitt's death, in 1806 the king was at last obliged to admit him to office, and Fox became Foreign Secretary

Fox, George (1644-91) founder of the Society of Friends 288

Foxe, John (1516-87) Eng martyrologist in 1563 he was made prebendary of Salisbury and afterwards vicar of St Giles Cripplegate his *Book of Martyrs* was published in 1563

Frampton, Sir George James (born 1866) Eng sculptor distinguished by decorative effects obtained in coloured marble and bronze Calcutta statue of Queen

FRANCE

GAMA

Victims Socrates Teaching Peter Pan Edith Cavell monument
France, Anatole (1844 1924) pen name of Jacques Anatole Thibault Fr novelist and man of letters his works include *The Crime of Sylvestre Bonnard* (1881) 'Thais' (1890) *Penguin Isle* (1908), 'The Revolt of the Angels' (1914)
Francesca de Paula or **St Frances of Paola** (1416 1507) It Saint founder of the order of the Minims canonised (1519)
Francis, Francesco (1450-1517) It painter chief exponent of the Bolognese school pupil of Lorenzo Costa whom he after wards excelled in colour and sentiment though not in composition
Francis I (1494 1547) King of Fr his reign marked by prolonged struggle to annex It, ending in failure and his imprisonment at Madrid (1525) although vacillating in character he strengthened his kingdom and was a great patron of art and literature
Francis II (1544 60) King of France married Mary Stuart Queen of Scots during his reign of a year and a half It was governed by his mother Catherine de' Medici and the Guise faction
Francis I (1777 1830) King of the Two Sicilies son of Ferdinand IV in early life sympathized with liberal ideas but later became reactionary and attempted to suppress revolution of 1820
Francis II (born 1838) King of the Two Sicilies succeeded his father Ferdinand II (1859) neglected the reform of his constitution and fled before Garibaldi's invasion (1860)
Francis I (1708 65) Ger king and Holy Rom emperor son of Leopold Duke of Lorraine to whose dominions he succeeded (1729) married Maria Theresa daughter of the Emperor Charles VI and on the latter's death (1740) contested the empire with Charles VII and was elected (1745)
Francis II (1768 1835) Emperor of Austria and last ruler of the Holy Rom Empire supported his sister Marie Antoinette during Fr Revolution and was defeated by Napoleon who married his daughter afterwards joined with Allies against Napoleon and was in his defeat
Francis d'Assisi (1182 1226) It saint and founder of Franciscan order based on the vow of poverty
Francis de Sales (died 1622) Fr divine and saint entered the priesthood (1593) opposed the doctrines of Protestantism bishop of Geneva (1602) canonised by Alexander VII (1665) his Introduction to a Devout Life was widely read
Francis Ferdinand (1863 1914) Austrian archduke nephew of Francis Joseph Emperor of Austria became heir apparent to the throne of Austria Hungary (1889) his assassination at Sarajevo precipitated the World War
Francis Joseph (1830 1916) Emperor of Austria and King of Hungary his reign (1848 1916) was marked by the loss of Austria's Italian possessions (1859) defeat at the hands of Prus (1866) and prolonged racial disputes leading to the Balkan wars and general European disaffection
Frank, Cesar Auguste (1822-90) Fr musician born in Belg composed *Les Bestiudes* (oratorios) and much orchestral and chamber music
Frankau, Gilbert (born 1894) Eng novelist achieved success with *Peter Jackson* *Cigar Merchant* (1919) *One of Us* (verse) (1912) *The Love Story of Allette Brunton* (1922) Gerald Cranston's Lady (1924)
Franklin, Benjamin (1706-90) Amer statesman and scientist, 235.
Franklin, Sir John (1786 1847), Eng explorer, 507
Fraser, Sir James George (born 1854) Eng anthropologist his *Golden Bough* is the most complete study of comparative religion mythology and folklore extant
Frederick I (1123-90) Barbarossa (red beard), Holy Rom Emperor most of his thirty years reign spent in costly attempts to enlarge Rom empire which finally failed at battle of Legnano

(1176) engaged in quarrel with Pope Alexander II and was excommunicated
(1160) set out on third crusade (1190) and was drowned
Frederick II (1194-1250) Holy Rom emperor grandson of the above undertook crusade to Holy Land and adopted title of King of Jerusalem (1228) by the Charter of Worms (1231) gave independence to Ger princes
Frederick I (1067-1133) King of Prus and third elector of Brandenburg gained title of king (1701) by aiding Emperor Leopold I in war of 8p Suc cession
Frederick II (1712-86), King of Prus the Great, 785
Frederick III (1831-88) Friedrich Wilhelm Nikolaus Karl King of Prus and Ger emperor son of William I first Ger emperor as crown prince com manded at Sedan and at the siege of Paris died shortly after accession married Princess Royal of Eng (1888)
Frederick V (1586-1622) Elector Palatine chosen as nominal King of Bohemia owing to his Protestant influence his defeat at Prague (1618) at the hands of Ferdinand II marked the first sta. of the Thirty Years War afterwards an elec. was voted by Frederick IV whom he succeeded in 1610
Frederick III (1463-1525) the Wise Elector and Duke of Saxony succeeded his father Ernest (1485) refused Ger imperial throne in favour of Charles V he was the intimate friend and patron of Luther
Frederick III (1609-70) King of Denmark he made Denmark an absolute monarchy and established hereditary succession lost many islands in unsuccessful war with Sweden
Frederick VI (1768-1839) King of Denmark and Norway his part in the armed neu trality of the north led to destruction of his fleet by Nelson (1801) joined with Napoleon but defeated by Allies (1814)
Frederick VII (1808-63) King of Denmark last of the Oldenburg line his whole reign was troubled by the revolt of Schlesw., Holsten
Frederick VIII (1843-1912) King of Den mark brother of Queen Alexandra of Ing and father of Haakon VII of Norway
Frederick Augustus I (1750-1827) first King of Saxony son of the elector Frederick Christian joined the league formed by Frederick the Great (1788) an ally of Napoleon who made him king and also Duke of Warsaw after the battle of Leipzig lost much of his kingdom but retained title
Frederick Henry (1584-1647) Prince of Orange Dutch stadtholder his treaty of Munster (1648) ended the 80 years struggle with sp reign marked by a great revival of learning and commercial enterprise
Frederick William (1620-88) Elector of Brandenburg and Duke of Prussia succeeded (1640) and restored pro perty after Thirty Years War
Frederick William I (1688-1740) King of Prussia succeeded his father Frederick I (1713) adopted a policy of peace retrenchment and reform greatly de veloping modern Prus father of Frederick the Great 785, 786, 787
Frederick William II (1744-97) King of Prus son of August Wilhelm succeeded his uncle Frederick the Great (1786) whose great achievements he partly un did through indolence and reactionary policy
Frederick William III (1770-1840) King of Prus a well intentioned but waver ing monarch who all but lost Prus to Napoleon his queen Louisa became national heroine through her efforts to avert disaster
Frederick William (born 1882) Fa Ger Crown Prince commanded 5th Ger Army during World War abdicated (1918)
Freeman, Edward Augustus (1823-92) Eng historian Eogrus professor of modern history at Oxford (1858) his works include History of the Nor man Conquest (1867-76) Historical Essays (1871-92)

French, John Denton *Punkstone* *See*
Ypres Earl of
Frere, Sir Henry Bartle (1811-84) Eng
diplomatist and statesman special com-
missioner to E Africa influential in
abolishing slave trade in Zanzibar
Governor of Cape Colony (1877-80)
Frith, William Powell (1819-1908) Eng
artist his paintings include *Ramsgate*
Sandwich *Derby Day* *The Railway*
Station
Frobisher, Sir Martin (1585-94) Eng sailor
made his first voyage (1578) with the
object of discovering a north west pas-
sage to China and proceeded as far as
Frobisher's Bay after two similar
expeditions he served under Drake
(1585) against the Sp Armada com-
manding the *Triumph* defending Brest
against the Spaniards he received a
fatal wound
Frebel, Friedrich Wilhelm August (1782-
1852) Ger educationist originator of
the kindergarten system
Froissart, Jean (1338-1410) Fr chronicler
his accounts of the wars between Fr
and Eng are vivid but uncritical
Froude, James Anthony (1818-94) Eng
historian his writings include *History*
of England from the Fall of Wolsey
to the Death of Elizabeth and *His-*
torical Miscellanies of Early
times
Fry, Elizabeth (1780-1845) Eng prison
reformer 559
Fuller, Thomas (1808-1861) Eng clergy-
man and author *History of the*
Worthies of Fausland
Fulton, Robert (1765-1815) Amer engineer
505, 1247 1248
Furness, Christopher, 1st Baron (1812-
1911-) Eng shipowner founded the
Furness line of steamships
Furness, Harry (1854-1925) Irish carrier
turnst and author joined *Lanch* staff
(1880)
Fust, Johann (died 1466?) Ger money
lender associated with Gutenberg, in
invention of printing 590, 591, *portrait*
592
Gambrough, Thomas (1727-88) Eng
punter 1478
Galen Claudius (130-200?) Gk physician
known as the world work-
er ranks next to Hippocrates
Galileo (1564-1642-) It astronomer and
natural philosopher 155 *picture* 153
Gail Franz Josef (1715-1828) Ger anti-
omist founded science of phrenology
Galatin Abraham Albert (1811-1849)
Amer statesman and economist born
at Geneva as sec to treasury reduced
national debt carried out negotiations
for Treaty of Ghent (1815)
Gail-Curtis, Amelia (born 1889) It singer
815
Galsworthy, John (born 1867) En, novelist
and dramatist novels dealing with his-
tory of Eng kind of *claves* distinguished by
critical insight into social problems of
conduct and social idealism (*The Man*
of Property *The Patrician* *Peri-*
terinity) pronounced success as a
dramatist of ultra realistic school de-
picting, in shades of social and ethical
contrast (*Justice Strife The Man Game*)
Galt, Sir Alexander Tilloch (1817-93)
Canadian statesman first financial
minister of Dominion (1867) intro-
duced decimal currency and protective
tariffs developed Quebec and pro-
moted federation of Brit N Amer
Galt, Sir Francis (1822-1911) Eng
anthropologist and meteorologist first
to chart weather on large scale initiated
theory of anti cyclones creator of
modern science of eugenics system
based scientific study of finger prints
(*Hereditary Genius* *Inquiries*
into Human Faculty)
Galvani, Luigi (1737-98) It physiologist
professor of anatomy at Bologna (1782)
studied effect of electricity on muscles of
animals and discovered phenomenon
called galvanism
Game, Vasco da (1469?-1524) Port
navigator discovered route to India by
Cape of Good Hope (1497) appointed
viceroy of India on death of Albuquerque
(1542) by John III of Port 1497

explorations enriched Port and opened way to eastern colonization

Gambetta, Léon Michel (1838-82) Fr statesman elected deputy for Paris and Marseilles (1869) became most influential member of Opposition escaped from siege of Paris in a balloon resisted monarchist influences pres of Chamber of Deputies (1879) accidentally shot (1882)

Gambier, James, Baron (1756-1833) Brit sailor as admiral (1805) bombarded Copenhagen and captured Danish fleet court martialled for refusing to use fire ships against 1st fleet (1809) but acquitted

Garcia, Manuel (180-1806) Sp singing instructor son of Minus Garcia noted tenor and teacher invented laryngeal scope for many years most famous European singing master 1858

Gardner, Alfred George (born 1865) Eng journalist editor of *The Daily News* (190-19) character studies brilliant and arresting *Prophecy, Priests and Kings, Pillars of Society, The War Lords*

Gardner, Samuel Rawson (1829-1902) Eng historian elected flow of All Souls (1884) professor of modern history at King's College London his books are unemotional but accurate and minute *History of the Great Civil War, History of England*

Gardiner, Stephen (1883-1977) Eng private and statesman son to Wolsey employed to negotiate the divorce from (schism of) Arkwright Bishop of Worcester (1931) and sec of state at fringed king's supremacy over the Church in the 16th C. Obscurely opposed Cromwell and the Protestants imprisoned under Edward VI and deprived of his bishopric restored and made Chancellor under Mary

Gardiner, James Abram (1811-81) 20th pres of U.S.A. commanded infantry brigade at Shiloh during Civil War Lincoln's right hand man at crisis of struggle incurred opposition during presidency (1860) by favouritism assassinated 1881

Gardino, Giuseppe (1807-82) It soldier 87

Garnett, Richard (1835-1908) Eng librarian and man of letters keeper of the printed books at Brit Museum (1890-93) author of *Lives of Milton, Carlyle and Emerson* and many literary commentaries

Garnier, Robert (1845-99) Fr dramatist forerunner of development of Fr classical drama as realized by Cocteau his masterpiece *Brindley and Lee* *Justine*

Garnick, David (1877-78) Eng actor 229, 100

Garrison, William Lloyd (180-79) Amer abolitionist founded *The Liberator* famous anti-slavery journal established Anti-Slavery Society in Philadelphia (1843)

Garrison, Charles (died 1920) Eng novelist stories of healthy sentiment widely popular *Just a Girl* *In Cupid's Chains*

Garnin, James Louis (born 1868) Eng journalist editor of *The Observer* (1908) voluminous writer on foreign and economic subjects

Gassmann, George (1836-77) Eng poet and dramatist wrote first Eng prose comedy *The Supper* (1868) and an early Eng satire in blank verse *The Steel Glass* (1876)

Gassmann, Sir William (1850-1919) Eng judge said to have committed Prince Hal to prison for assaulting him in court noted for fearless and impartial decisions

Gaskell, Elizabeth Cleghorn (1810-65) Eng novelist 1400

Gassendi, Pierre (1592-1655) Fr philosopher attempted to reconcile science and religion postulated independent first cause and immortality of soul

Gatling, Richard Jordan (1818-1903) Amer inventor invented revolving machine gun named after him

Gauguin, Paul (1848-1903) Fr painter early post-impressionist in mid life lived in Tahiti paintings marked by keen decorative sense and bizarre beauty

Gautier, Théophile (1811-72) Fr author in youth surpassed contemporaries of romantic school in floridity of style and extravagance of sentiment later manner more restrained but limited by narrow outlook *Wille de Maupin, Les Jeunes Femmes, L'histoire de Romantisme*

Gay John (168-1732) Eng poet chiefly known for his *Beggar's Opera* and its sequel *Polly* successfully revived in London (1920)

Gay-Lussac, Joseph Louis (1778-1850) Fr physicist made successful balloon ascents and detected electricity in atmosphere discovered law that hydrogen and oxygen combine in proportion of one volume of the former to two of the latter discovered cyanogen and investigated properties of iodine

Geddes, Sir Auckland Campbell (born 1879) Brit politician Brit ambassador to U.S.A. (19-20) formerly professor of anatomy at McGill Univ after serving in World War became successively Director of Recruiting Minister of National Service Pres of Local Govt Board and Minister of Reconstruction brother of Sir Eric Geddes

Geddes, Sir Eric Campbell (born 1875) Brit politician after brilliant career as railway organizer appointed Director of Transport in theatre of war (1915) under Lloyd George regime became first Lord of Admiralty (1919) councillor and Minister of Transport (1919)

Geddes, Patrick (born 1854) Eng scientist and sociologist professor of botany at Dundee (1915) director of Cities and Town Planning Labitation and of Zionist plan for reconstruction of Jerusalem

Geddes, Sir Archibald (1835-1924) Scot geologist Pres of Royal Society (1908) directed geological survey of U.K. made valuable researches in volcanology *Story of a Boulder, Text Book of Geology*

Geddes, Heinrich (1814-79) Ger physicist and scientific instrument maker invented Gaussner sealed glass tube mercury air pump and normal thermometer

Geller, Christian Friedrich (1715-69) Ger poet called La Fontaine of Germany on account of his fables

Gentz, Adeline (born 1878) Danish dancer *première danseuse* at Copenhagen Opera (189-) appeared frequently at Empire Theatre London

Genghis Khan see Jenghis Khan

Gennep, or Gennep (1890-47) Laval king strengthened Laval power in Sp invaded northern African (428) captured Carthage and plundered Rome

Geoffrey of Monmouth (1100-4) Brit chronicler Bishop of St Asaph in 12th Arthurian legends *Historia Brittonum*

Geoffrey Plantagenet (1113-51) Count of Anjou married Matilda the daughter of Henry I of England and widow of Emperor Henry V founder of Plantagenet line

Geoffrey-Saint-Hilaire, Étienne (1772-1844) Fr naturalist attacked Cuvier's theory of invariability of species and partly anticipated Darwin's evolutionary researches

George (born 1902) Eng primer 4th son of King George V entered R.N. College Osborne (1916) voyaged to West Indies on *Terminus* (1920)

George I (1660-1727) King of Eng succeeded to electorate of Hanover (1698) crowned King of Eng on death of Anne (1714) took small part in govt but was prominent in European politics

George II (1683-1760) King of Eng son of George I married Caroline of Anspach (1706) headed opposition to his father succeeded to throne (1727) quarrelled with his son Frederick present at the battle of Dettingen (1745) left control of home affairs to Queen Caroline and Walpole

George III (1738-1820) King of Eng son of Frederick Prince of Wales first Brit born Hanoverian king ascended the throne (1760) strongly against any concessions to Amer colonies by un-constitutional influence obtained over

throw of coalition ministry but submitted almost entirely to influence of younger Pitt his mind gave way in 1780

George IV (1762-1830) King of Eng son of George III appointed regent (1811) succeeded to throne (1820) unpopular on account of his extravagance and attempt to divorce his wife Caroline of Brunswick

George V (born 1865) King of Eng 1458

George I (1845-1913) King of the Hellenes Dan prince brother of Queen Alex and accepted crown (1863) reign marked by struggles with Turkey and Balkan States assassinated at Salomica (1913)

George, David Lloyd see Lloyd George, David

George, Henry (1839-97) Amer economist proposed nationalization of land by the single tax (*Progress and Poverty*)

George, Walter Lancel (born 1882) Eng novelist achieved singular success with novels of psychological interest style characterized by outspokenness and logic (*The Making of an Englishman, Caliban, Blind Alley*)

Gerard James Watson (born 1887) Amer diplomatist ambassador in Berlin at outbreak of World War guarded Brit interests in Ger conducted difficult negotiations prior to entry of U.S.A. into hostilities (1914-19) years in Ger many *Face to Face with Kaiserism*

Gérault, Jean Louis (1791-1834) Fr printer reacted against pseudo classical school Raft of the *Madusa* realistic shipwreck scene marked by freshness of treatment and dramatic detail

German, Edward (born 1862) Eng composer musical director at the Globe Theatre incidental music to *Richard III* and *Henry VIII* established reputation as fluent melodist (*Merris England* completed Sullivan's *Emerald Isle*)

Germanicus, Gnaeus (15 B.C. A.D. 19) Rom general nephew of Tiberius defeated Arminius on the Weser probably poisoned by Tiberius who was jealous of his fame

German, Jean Léon (1824-1904) Fr painter and sculptor treated classical subjects with modern touch best known pictures *The Age of Augustus* and *The Birth of Christ* sculptures *Bellona, Napoleon* etc

Gerry Eldridge (1744-1814) Amer statesman secretary of Declaration of Independence (1776) as Gov of Mass. chieftain (1810-12) divided state into senatorial districts one of which of salamander shape gave rise to term gerrymander meaning unfair manipulation of constituencies

Gerson, Jean Charles de (1563-1629) Fr scholar attempted to end Great Schism and to simplify scholastic education (*The Consolation of Theology*)

Gervex, Henri (born 1852) Fr painter of powerful realistic pictures (*Portrait of a man at the Hotel Dieu*) painted decorations for public buildings (*The Civil Marriage, The Board of Charity*)

Gervinus, Georg Gottfried (180-71) Ger author strove for unity of Ger state founded the *Deutsche Zeitung* (*Foundations of History*)

Ghiberti, Lorenzo (1378-1455) It sculptor designed second pair of bronze gates for the Baptistery at Florence and Michelangelo pronounced the result fit for the gates of Paradise

Ghirlandajo, Domenico (1449-94) It painter employed by Sixtus IV to paint frescoes in Sistine chapel painted *The Last Supper, Florence 281, 282*

Gibbon, Edward (1734-94) Eng historian author of *The Decline and Fall of the Roman Empire* unrivalled for power of generalization and accurate presentation

Gibbons, Grinling (1648-1720) Eng carver in wood recommended by Evelyn to Charles II executed foliage ornamentation in choir of St Paul's and episcopal throne in Canterbury cathedral 200

Gibbs, James (1682-1764) Eng architect, built church of St Martin in the field, Radcliffe library Oxford and completed

steeple of Wren's church of St Clement Danes

Gibbs, Sir Philip Hamilton (born 1877), Eng author and journalist, was correspondent to *Daily Chronicle* (1915-18) dispatches remarkable for descriptive power, beauty, and pathos (Street of Adventure, notable novel of Fleet Street life, "The Soul of the War" "Realities of War")

Gibson, Charles Dana (born 1867), Amer artist, popularised a type of Amer female beauty in his drawings of "The Gibson Girl" (sketches and cartoons), "The Education of Mr Pipp"

Gibson, John (1790-1866), Eng sculptor revived use of colour in statuary, as in his "tinted Venus" (Sleeping Shepherd" statue of Queen Victoria in Houses of Parliament)

Giffen, Sir Robert (1837-1910), Brit statistician and economist born in Lanarkshire assistant to Lord Morley on *The Fortnightly Review* and to Bagehot on *The Economist* entered statistical department Board of Trade (1876) "The Growth of Capital", *Economic Enquiries and Studies*)

Gifford, William (1766-1826) Eng writer, famous for attacks on Keats Shelley, and "The Cockney School of Poetry" in *The Quarterly Review* (1809-24) ("Epistle to Peter Pindar", trans of Juvenal)

Gilbert, Alfred (born 1854) Eng sculptor his early manner Grecian in simplicity and grace later developed fancy and imagination in exquisite work such as the "Kios" statue in Piccadilly ("The Kiss of Victory" "Icarus")

Gilbert, Sir Humphrey (1539?-83), Eng navigator half brother to Sir W Raleigh founded first Eng colony in N America (1583)

Gilbert, Sir John (1817-97) Eng artist famous for illustrations of Shakespeare Sir Walter Scott and Cervantes and vigorous treatment of historical subjects

Gilbert, Sir William Schwanck (1850-1911) Eng playwright 1465

Giles, Ernest (1839-97) Eng explorer of Australia most successful expedition from Fowler's Bay to Perth (1874) ("Travels in Central Australia")

Gill, Sir David (1843-1914) Brit astronomer measured transit of Venus, photographed comet of 1882 astronomer royal at Cape of Good Hope (1879-1900) compiled catalogue of stars in southern hemisphere

Gillette, William (born 1855) Amer actor and playwright impersonations of Sherlock Holmes, and in *The Admirable Crichton* very popular (*Clarice*, *Secret Service*)

Gilman, Daniel Cost (1831-1908) Amer educationist, part founder and first pres of Johns Hopkins University, Baltimore, pres of Carnegie Institution, Washington pres of Amer Bible Society

Ginsburg, Christian David (1881-1914), Polish Hebrew Scholar, helped to revive O.T. proved Shapur MBE offered to Brit Museum to be forged

Gisbert, Vincenzo (1801-52) It politician and philosopher, professor of theology at Turin, exiled for independent opinions, tried to reconcile science and religion ("Introduction to the Study of Philosophy")

Giulotti, Giovanni (born 1842), It statesman, five times prime minister, recommended Italy's neutrality during World War on materialistic grounds

Giuliano, Luca (1832-1705), It painter, noted for rapidity and versatility, decorated the Escorial ("Battle of St Quentin", "Taking of Montmorency")

Giorgione, George (1471-1511), It painter of the Venetian school, Titian considered it an honour to complete his work, "The Conquest" (Louvre), "The Golden Age" (National Gallery London)

Goethe, Johann Wolfgang (1749-1832), Ger poet, 192, 61

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Gordon, Lord George (1751-98), 3rd son of 8rd Duke of Gordon, in 1780 headed the "No Popery" riots in London, tried for high treason, but acquitted, died in prison undergoing sentence for libellous offences

Gore, Charles (born 1853), Eng prelate, Bishop of Worcester (1902-5) Bishop of Birmingham (1905-11) Bishop of Oxford (1911-19) author of numerous theological works

Gorgas, William Crawford (1854-1920), Amer surgeon, waged successful war against disease in Havana, and during building of the Panama Canal

Guarini, Emilio de (1806-81), Fr journalist, founder of *La Presse* (1836), first cheap Fr newspaper

Graud, Albert (born 1860) Belg poet a disciple of Verlaine verses marked by vigorous feeling and finished technique ("Pierrot Lunaire" "Hora du Siècle")

Graue, George Robert (1857-1908) Eng novelist gloomy studies of middle class life ("The Private Papers of Henry Bycroft" the "Nether World" "New Grub Street")

Graub, Romano (1492-1548), It painter pupil of Raphael whom he succeeded as leader of Rom school

Gladstone, Herbert John, 1st Viscount (born 1854), Brit politician youngest son of W E Gladstone Home Sec (1905-9) Gov Gen of S Africa (1909-14) took prominent part in relief of Belgian refugees (1914)

Gladstone, William Ewart (1809-98), Eng statesman, 385.

Glauber, James (1800-1903) Eng meteorologist and aeronaut founded Meteorological Society (1860) helped to establish Aeronautical Society highest balloon ascent (with Coxwell) 28 000 ft ("Travels in the Air" "Crystals of Snow")

Glanville, Ranolf de (died 1190), Eng lawyer chief justiciar under Henry II wrote valuable treatise on Eng laws and customs

Glanville, Owen (1359-1416) last in dependent Prince of Wales outlawed by Henry IV became champion of Welsh independence maintained contest for 14 years among the Welsh mountains died while negotiating with Henry V whose widow his son married

Glanville, Algernon Northwick, Baron (1830-1908) Eng journalist editor (18-2) and proprietor (1876) of the *Morning Post*, suggested formation of Primrose League

Glinka, Michael Ivanovitch (1803-57) Rus composer originator of Rus school of national music imperial chapelmaster and conductor of opera at St Petersburg *Life for the Tsar* opera orchestral piece, "Kamarskaya")

Glanville, Humphrey, Duke of the "Good Duke Humphrey" (1391-1447) son of Henry IV protector of Eng during minority of Henry VI patron of letters made enemies by his ambition

Glanville, Thomas of Woodstock, Duke of (1355-97) youngest son of Edward III constable of Eng, made Earl of Buckingham (1377), endeavoured to restrain extravagance and incompetence of Richard II, became too powerful and was arrested by Richard and executed

Glinka, Christoph Wilhelm von (1714-87) Ger composer founder of a new school of opera partly anticipating Wagnerian music-drama, his opera *Iphigenie en Aulide* caused prolonged critical warfare (*Orfeo ed Euridice*, *Alceste*)

Glyn, Elmer, Eng novelist achieved wide popularity with her stories of sentiment and passion ("Three Weeks", "His Hour", "The Sequence")

Gneiss, August Wilhelm Anton Nordhardt, Count von (1760-1831) Prus soldier, served on Eng side in Amer War of Independence, helped to reorganize Rus army, Blucher's right-hand man, gov of Berlin (1818)

Gneiss, Hermann Hermann Rudolf Friedrich von (1816-95), Ger jurist and politician, made law a "living force instead of a theory", member of the Reichstag (1870-84), admirer of Eng law and free institutions ("History of the English Constitution")

Godfrey, Charles (1790-1863), Eng musician, founder of a family of band masters, appointed musician in ordinary to the king (1831), band master of the Coldstream Guards

Godfrey, Sir Edmund Barry (1821-78), Eng magistrate, received depositions of Titus Oates in regard to "Popish plot" and was afterwards found dead in mysterious circumstances

Godfrey of Beaulieu (1060?-1100), Fr crusader, prominent in capture of Jerusalem, of which city he was first Christian ruler, became hero of legend

Godin, Jean Baptiste Andre (1817-98), Fr

socialist, introduced profit sharing into his successful iron works (Solution, Sociales)

Godkin, Edwin Lawrence (1831-1902) Ir-Amer journalist edited *The Nation* and *The Evening Post* in New York, and carried on campaign for reform of civil service and finance ("Problems of Modern Democracy")

Godolphin, Sidney, 1st Earl of (1645-1712), Brit statesman, held office under Charles II, James II William III, and Anne took part in the secret negotiations of Charles II with the Fr king voted for the exclusion of James, but became his minister as Anne's lord treasurer supported Marlborough, and shared his fall (1710)

Godoy, Manuel de (1767-1851), Sp statesman and royal favourite minister of Charles IV called Prince of the Peace because he brought to an end in 1795 the war with Fr intrigued with Napoleon for the overthrow of the Bourbons imprisoned on the discovery of his schemes, but released by Murat (1808)

Godunov, Boris (1552-1605) Tsar of Rus in lifetime of Theodore (Iodory) attached peasants to the land and created the patriarchate chosen Tsar (1582)

Godwin, Mary Wollstonecraft (1759-97), Eng pioneer of women's rights movement wife of William Godwin political writer and freethinker her daughter Mary married the poet Shelley ("Indication of the Rights of Woman")

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Gorky, Maxim (born 1869) Rus author his works include (conrad's) *John of Lithuania* and *The Mother*

Gorst, Sir John Eldon (1875-1916) Brit statesman (civil commissioner of Was kato New Zealand (1861-63) Solicitor General (1885-86) Under Secretary for India (1886-91) Financial Sec to the Treasury (1891-2)

Goschen, George, 1st Viscount (1831-1907) Brit statesman First Lord of the Admiralty (1871 and 1895-1900) Chancellor of the Exchequer (1886-92)

Goschen, Sir William Edward, Bart (1847-1924) Brit diplomatist after representing Brit at various courts was Ambassador at Berlin (1908-14)

Gosse, Sir Edmund (born 1849) Brit poet biographer editor and critic his many works include *A History of 18th century literature* (1880)

Gough, Hugh, 1st Viscount (1779-1869) Brit field marshal after serving at the Cape and the West Indies went to Port (1809) sent to India (1837) to command in Mysore and next year commanded the Brit troops in China became commander in chief in India (1843) conducted the Malabar war of 1843 and the Sikh wars of 1843 and 1848

Gould, Sir Francis Carruthers (1844-1925) Brit caricaturist and journalist

Gounod, Charles François (1818-93) Fr composer 1846

Gouraud, Henri Joseph Eugène (born 1867) Fr soldier in command of the Fr forces at Gallipoli (1915) commanded the 1st 4th army 1918 and 1917 with an interval in Morocco high command in Syria and China and commander in chief of Fr forces in the Levant (1918)

Gower, John (died 1408) Eng poet his chief works are *Speculum Mundi* *Inter Vois* *Flumina* and *Confessio Amantis*

Gracchus, Gaius Sempronius (154-121 B.C.) Rom tribune nephew of Scipio Africanus removed his brother's agrarian law was twice tribune ultimately proscribed and slain

Gracchus, Tiberius Sempronius (died 133 B.C.) Rom tribune brother of first named carried his agrarian law but was killed in a tumult raised by Scipio Aelica

Gracchus, Tiberius Sempronius (died 21 B.C.) Rom general commanded against Hannibal and defeated Hanno shortly afterwards made prisoner and killed

Grass, William Gilbert (1848-1915) Brit cricketer most famous player the game has known captured Gloucestershire and represented All England

Graham of Claverhouse John (1643-89) Scot soldier after some service in the 1st and Dutch armies was employed against the Covenanters in Scot by whom he was defeated at Drumclog (1679) was loyal to James II who created him Viscount Dundee killed at the battle of Blenheim

Grand, Sarah Brit novelist real name Frances Elizabeth McCall (The Heavenly Twins Adam's Orchard)

Grant, James Augustus (1827-92) Scot traveller, 1919

Grant, Sir James Hope (1806-76) Eng soldier served in the first Chinese war the Sikh wars, and in the Indian Mutiny in command of the force sent to cooperate with the Fr in China (1860)

Grant, Ulysses Simpson (1822-85) Amer general and statesman served in the Texas campaign (1845) in 1862 during the Civil War captured Fort Henry and Fort Donelson won the battle of Shiloh defeated Price at Iuka captured Vicksburg (1863) and relieved Chattanooga commander in Chief of the Federal armies (1864) Pres of the U.S.A. (1868-76)

Granville, Granville Leveson-Gower, 1st Earl (1773-1848) Brit diplomatist held office under Pitt and Addington ambassador at St Petersburg the Hague and Paris

Granville, Granville George Leveson-Gower, 2nd Earl (1815-91) Brit statesman Vice Pres of the Board of Trade (1848) Foreign Sec (1851, 1870-74, 1880-83)

Pres of the Council (1862-1865-8, 1869) Colonial Sec (1868-70 1886)

Gratian (459-83) Roman emperor son of Valentinian on whose death (375) he became joint emperor of the West repelled an incursion of the Alemanni friend of St Ambrose murdered by the officers of Maximus

Grattan, Henry (1746-1820) Ir statesman entered the Ir Parl (1775) in 1782 by means of the volunteer movement succeeded in obtaining legislative independence for his country entered the Brit Parl (1806) devoted his last years to the cause of Catholic Emancipation

Gray, Edwin (1845-1901) Amer electrician perfected various telegraphic devices, invented telautography 1889, 1100

Gray, Thomas (1718-71) Eng poet wrote his *Ode to Milton* College and some minor poems (1741) and ten years later the *Elegy in a Country Churchyard* appeared became professor of modern history at Cambridge (1768)

Grealey, Horace (1811-72) Amer journalist and politician established the *New York Tribune* (1841) became a member of Congress (1848) one of the founders of the Republican party (1855) ultimately became a Democrat

Green, John Richard (1837-83) Eng historian author of *A Short History of the English People* (1874) *A History of the English People* (1877-80) etc

Greenaway, Kate (1846-1901) Brit artist famous for her drawings of children

Greenwood, Frederick (1830-1909) Brit journalist edited the *Queen* (1861-63) *Cornhill Magazine* (1864-68) *Pall Mall Gazette* (1865-90) *St James's Gazette* (1890-88)

Gregory I (died 604) Pope called the Great appointed gov of Rome but resigned it and became Abbot of St Andrew's Rome succeeded Pelagius II as Bishop of Rome renounced communion with the A Christians composed chants and established a musical school

Gregory II (died 731) Pope elected 715 sent Boniface to preach in Ger

Gregory III (died 741) Pope elected 731 opposed the Iconoclasts

Gregory IV (died 844) Pope elected 827 perhaps the first to assert the supremacy of the ecclesiastical over the civil power

Gregory V (died 999) Pope elected 906 by help of the Emperor Otto III

Gregory VI (died 1047) Pope elected 1044 compelled to abdicate by Henry III (1046)

Gregory VII (died 1085) Pope elected 1073 attempted to enforce spiritual control over the sovereigns of Europe was firmly opposed by William I of Eng and Philip I of Fr but he excommunicated Henry IV of Ger and compelled him to do penance (1077) although he was eventually deposed by him

Gregory VIII (died 1187) Pope only held office for a month

Gregory IX (died 1241) Pope elected 1227 carried on an almost continuous struggle with the Emperor Frederick II

Gregory X (died 1276) Pope elected 1271 held a council at Lyons for reuniting the GK and Lat churches

Gregory XI (died 1378) Pope elected 1370 resided at Avignon but removed to Rome in 1377

Gregory XII (died 1417) Pope elected 1406 resigned 1409

Gregory XIII (1502-85) Pope elected 1572 promulgated the Reform Calendar of Lilio (1582) favoured the Jesuits

Gregory XIV (died 1591) Pope elected 1590 excommunicated Henry of Navarre

Gregory XV (died 1623) Pope elected 1621 canonized Ignatius Loyola and Xavier

Gregory XVI (1765-1846) Pope elected 1831 opposed reform

Granville, George (1712-70) Brit statesman Prime Minister (1768-65) signified his term of office by the passing of the Amer Stamp Act

Granville, Sir Richard (1640-91) Eng admiral went with Raleigh to Virginia and returned in 1685 to establish a

settlement there took part in defeating the Armada killed in an engagement with the Spanish

Graham, Sir Thomas (1516-79) Eng merchant founded the Royal Exchange (1566) and Graham College (1875)

Graess, Jean Baptiste (1726-1806) Fr painter many of his pictures (chiefly portraits of girls) are in the Wallace Collection, London

Greville, Charles Cavendish Fulke (1794-1865) Eng memoir writer compiled *The Greville Memoirs*

Grey, Charles, 2nd Earl (1764-1845) Brit statesman First Lord of the Admiralty in the Grenville ministry and on Fox's death Foreign Sec carried through the Slave Trade Abolition Bill in 1830 became Prime Minister and successfully carried the first Reform Bill

Grey of Fallodon, Edward Grey, 1st Viscount (born 1862) Brit statesman Foreign Sec (1905-10)

Grey, Sir George (1812-98) Brit statesman took part in Australian exploration (1836 and 1839) Gov of S Australia (1841-45) of New Zealand (1845-53 and 1861-67) Cape Colony (1853-60) Prime Minister of New Zealand (1877-84)

Grey, Lady Jane (1537-54) Queen of Eng appointed heir to the throne by Edward VI her cousin in contravention of the previous settlement of the succession reigned nine days beheaded

Greg, Edward Hagerup (1843-1907) Norwegian composer 1869

Griffith, Arthur (1872-1922) Ir statesman organizer of Sinn Féin Free of Dail Eireann (1922)

Grimaldi, Joseph (1779-1837) It clown born in London where he made his reputation as a comedian

Grinin, Joseph Ludwig Karl (1786-1863) Ger author 1871

Grinin, Wilhelm Karl (1786-1859) Ger author 1871

Greenwich, George (1847-1912) Brit actor and entertainer

Greenwich, Woodrow (1853-1919) Brit actor and artist

Græc, George (1794-1871) Brit historian and politician M.P. for city of London (1834-41) his *History of Greece* (1846-56) was followed by Plato and other Companions of Socrates

Gretius, Hugo (1583-1645) Dutch statesman and writer entered public life as pensionary of Rotterdam came to Eng (1610) as a commissioner on the Greenland fisheries question as a friend of Barneveldt and a supporter of Arminius, he was imprisoned in 1619 by the stadholder Maurice of Orange but escaped, eventually became Swedish ambassador at Paris (1635) his most famous work is *De Jure Belli et Pacis* (1625)

Greve, Sir George (1820-1900) Brit writer on music was for some years on the staff of Robert Stephenson director of the Royal College of Music (1888) edited *The Dictionary of Music and Musicians*

Grady, Sydney (1848-1914) Brit dramatist his plays include *A Paw of Spectacles* (1890) *The Mushrooms* (1899) and *A Fearful Joy* (1908)

Guassim, Bertrand du (1920-80), Ir soldier commanded against the Black Prince but was defeated and made prisoner (1364) afterwards collected all the free companies under his command and led them into Sp against Pedro the Cruel, whom he dethroned (1380)

Guazzarini, Francesco (1488-1540) It historian and diplomatist employed by Leo X and subsequent popes on the accession of Cosimo I retired into private life, and wrote his *History of Italy, 1494-1532* (1561)

Gude of Arrezzo (11th cent.), Benedictine or Camaldulan monk, made reforms in musical notation, first to make systematic use of musical staff, sometimes called the father of modern music, may have been born in France

Guildbert, Yvette (born 1869), Fr singer, actress, and novelist

Gunsard, Robert (1015?-85), Norman soldier defeated Leo IX at Civitella, and with his brother Humphrey, was invested by him with the dukedom of

Apulia; afterwards rescued Gregory VII from the Emperor Henry IV, invaded the Gk empire, and died when on another expedition against it, having defeated the fleets of the E. empire and Venice.

Guise, Henry, 3rd Duke of (1550-88), opponent of Coligny, and planner of the St. Bartholomew massacre, established the "Holy League," and made war on Henry III, after entering Paris in 1588 he was assassinated.

Guizot, François Pierre Guillaume (1787-1874), Fr. historian and statesman, made professor of modern history at the Sorbonne (1812), Sec Gen of the Ministry of the Interior (1814-15), Minister of Public Instruction (1832-36), Ambassador to England (1840), Minister of Foreign Affairs (1840-47), Prime Minister (1847-48), his chief works are "History of the English Revolution," "Histoire de la Civilisation en France," and "Histoire Parlementaire de France."

Gurney, Sir Goldsworthy (1793-1875), Brit chemist, invented the oxy-hydrogen blowpipe, the lime light, and the magnesium light, the Bude light, the oil vapour light, and the high-pressure steam jet of the tubular boiler.

Gustavus I (1496-1540), King of Sweden made his country independent of Denmark, and was elected king (1521) marked Lutheranism as the national religion.

Gustavus II (1594-1632), King of Sweden known as Gustavus Adolphus, grandson of last-named, resisted the aggressions of Sigismund, King of Poland, and concluded an advantageous peace in 1629 as head of the Protestant League (1630), took Colberg, won the battles of Breitenfeld and the Lech and in 1632 captured Munich, defeated Wallenstein at Lutzen, but was killed in the battle.

Gustavus III (1746-92), King of Sweden came to throne (1771) carried on a war with Russ (1788-90), and won the battle of Svenskünde, assassinated.

Gustavus IV (1778-1809), King of Sweden ascended throne (1792) refused to join in the Continental system (1806), and made an alliance with Eng., lost Finland (1808), deposed (1809).

Gustavus V (born 1858), King of Sweden succeeded 1907.

Gutenberg, Johann (1400?-86) Ger printer, 1480.

Guthrie, Sir James (born 1859) Scot painter pres of the Scot Academy (1902).

Guthrie, Thomas (1803-73), Scot divine, an ardent supporter of the Free Church movement, social reform, and total abstinence.

Guy, Thomas (1844?-1724), Eng bookseller and printer, founder of Guy's Hospital, represented Tamworth in Parl (1695-1707).

Guyon, Jeanne Marie Bouvier de la Motte (1648-1717), Fr. mystical writer.

Gwynn, Eleanor or Nell (1650-87), Eng actress, mistress of Charles II and mother of the 1st Duke of St. Albans.

H

Haakon I (915-61), King of Norway, proclaimed about 938, killed 961.

Haakon VII (born 1872), King of Norway, accepted crown (1905) on separation of Norway from Sweden.

Habermas, John (born 1842), Amer writer, chiefly known as the author of "Felsen's Bacter."

Hadfield, Sir Robert Abbott (born 1859), Brit. scientist, discovered manganese steel (1882).

Haeckel, Ernst Heinrich (1834-1919) Ger. scientist, his works include "Natural History of Creation" (1868), "The Last Link" (1898), and "The Riddle of the Universe" (1901).

Hagard, Sir Henry Rider (1856-1925), Brit novelist and agriculturist went to Natal in 1875 as sec. to Sir H. Bulwer, and was afterwards master of the High Court of the Transvaal returned to Eng (1879) his works include "Cetewayo and his White Neighbours" (1882), "Dawn" (1884), "The Witch's Head" (1885), "King

Solomon's Mines" (1888), "Eric Brighteyes" (1890), and "Rural Denmark" (1911).

Hahnemann, Samuel Christian Friedrich (1755-1843) Ger physician, founder of homoeopathy, he expounded his system in "Organon of the Healing Art" (1810), and other works.

Halg, Sir Douglas, 1st Earl of Beauregard (born 1861), Brit field-marshal, 1899; picture, 1890.

Hake, Thomas Gordon (1809-95), Brit physician and poet, his poems include "Parables and Tales" (1872), and "Maiden Ecstasy" (1888).

Hakluyt, Richard (1553?-1616), Eng geographer, chaplain to Sir H. Stafford, Eng ambassador in Fr., was assisted by Sir Francis Walsingham and Sir Walter Raleigh to publish his "Principal Navigations, Voyages and Discoveries made by the English Nation" (1589), he also collected and translated other narratives of voyages.

Haldane, Richard Burdon, 1st Viscount (born 1856), Brit statesman, lawyer, and philosopher, Sec for War (1905-12), Lord Chancellor (1912-15 and 1924) ("The Pathway to Reality").

Hale, Edward Everett (1822-1909), Amer writer among his works are "The Man Without a Country" (1863), "Ten Times One is Ten" (1870), "Naval History of the American Revolution" (1889).

Hales, Stephen (1677-1761) Brit botanist and divine discovered the flow of sap and wrote "Vegetable Statics" (1727), and "Hæmostaticks" (1731).

Hallifax, Charles Montagu, Earl of (1661-1715), Brit statesman, Chancellor of the Exchequer (1695) holding this office he distinguished himself by his recoinage of silver, and the first issue of exchequer bills, founded the public library which was the germ of the Brit Museum, 1st Lord of the Treasury (1697-99 and 1714-15).

Hall, Christopher Newman (1816-1902), Brit divine pastor of Christ Church, Lambeth (1878-92).

Hallam, Arthur Henry (1811-33), Brit essayist, son of Henry Hallam, the historian, and friend of Tennyson, who commemorated him in "In Memoriam."

Hallam, Henry (1777-1859) Brit historian, obtained through his Whig connexion an office in the stamp dept, which made him independent in 1818 published his "View of the State of Europe during the Middle Ages," and in 1827 finished his "Constitutional History of England," his last great work was the "Introduction to the Literature of Europe in the 15th, 16th and 17th Centuries" (1838), afterwards supplemented by "Notes."

Hallé, Sir Charles (1819-95), Brit pianist, made a specialty of Beethoven's sonatas, married Madame Normann Neruda (1839-1911) in 1868.

Halley, Edmund (1656-1742), Eng astronomer, son of a London soap boiler went to St. Helena (1676), and published as a result of his observations there, his "Catalogue of Southern Stars," superintended the printing of Newton's "Principia"; investigated the variations of the magnetic needle, became astronomer royal (1720), predicted the recurrence of the comet named after him.

Halliburton, William Dobinson (born 1880), Brit physiologist.

Hals, Frans (1590?-1666), Dutch portrait painter, his brother, Dirk (died 1656), was a painter of interiors and of animals ("The Laughing Cavalier").

Halsbury, Hardinge Giffard, 1st Earl of (1825-1921), called to the bar (1850), Solicitor-General (1875-80), Lord Chancellor (1885-92, 1895-1905).

Hambleton, William Frederick Danvers Smith, 1st Viscount (born 1868), Brit bus. man, became head of the firm of W. H. Smith and Son (1891).

Hamerton, Philip Gilbert (1834-94), Brit art writer, his works include "The Lake of Loch Awe and other Poems," with illustrations by himself (1855), "Lithing and Etching" (1868), "Modern French men" (1878), "Imagination in Land-

scape Painting" (1886), and "The Intellectual Life" (1878).

Hamilcar Barca (died 228 B.C.), Carthaginian general father of Hannibal, and head of a faction at Carthage, commanded in Sicily in the first Punic war, at the close of which he defeated the mercenaries, who had rebelled, killed in battle with the Vettones.

Hamilton, Alexander (1757-1804), Amer general and statesman, in 1777 was Washington's aide-de-camp, in 1782 a member of Congress, and in 1787 a delegate to the convention which drew up the Amer. Constitution, sec to the Treasury (1789-95), second-in-command of the army (1793), Commander-in-Chief (1799) killed in a duel with Aaron Burr, vice-president of U.S.A.

Hamilton, Emily (born 1872), Brit. author, playwright, and actress.

Hamilton, Emma, Lady (1781-1815), wife of Sir William Hamilton, was the daughter of a Welsh labourer named Lyon, and mother of Lord Nelson's daughter Horatia, although left in good circumstances, she died in extreme poverty, pictures 1055, 1057, 1060.

Hamilton, Sir Ian Standish Monteath (born 1853), Brit soldier fought in Afghan war (1878-79), Boer War (1881), Nile Expedition (1884-85), Burma (1886-87); the Tirah campaign (1897-98), South African War (1899-1902), commander-in-chief of the Gallipoli expedition (1915).

Hamilton, James, 1st Duke of (1606-49), Scot statesman and general, distinguished himself in the Thirty Years' war in the service of Gustavus Adolphus, was made royal commissioner in Scot, and took the king's side in the Great Rebellion, defeated at Preston, and beheaded.

Hamilton, James, 4th Duke of (1658-1712) statesman and soldier ambassador for Charles II at the Fr. court, was sent to the Tower by William III for supporting James II in Scot, headed the opposition to the Union.

Hamilton, Sir William (1730-1803), Brit diplomatist and antiquary in 1784 was sent to Naples as envoy-extraordinary, and collected many Etruscan and Grecian vases, which he sold to the Brit. Museum, married Emma Lyon (1791).

Hammond, Sir Henry Beauveue William Brand, 1st Viscount (1814-92), Brit politician, speaker of the House of Commons (1872-84).

Hammond, John (1744-1843) Eng politician though a member of the second Parl of Charles I, he took little part in affairs till his refusal to pay ship-money in 1635 for which he was prosecuted and adjudged guilty, though the judgment was afterwards reversed, member of the short and Long Parliaments, was one of the commissioners sent to Scot to attend the king, and was impeached as one of the five members, mortally wounded at Chalgrove Field.

Hampton, John Pakington, Baron (1790-1850), Brit politician, represented Dorsetshire from 1837 to 1874, became Colonial Sec (1852), 1st Lord of the Admiralty in 1856, and Sec. of War (1866-68).

Hamsun, Knut (born 1859), Norwegian novelist his works include "Hunger," "Growth of the Soul," and "Pan," awarded Nobel prize for literature (1920).

Handel, George Frideric (1685-1759), Ger. Eng composer, 313.

Hannibal (247?-183 B.C.), Carthaginian general, after attacking the allies of Rome in Sp. he marched into It. across the Pyrenees and Alps, won the battles of Ticinus and Trebia (218), and the next year defeated Flaminius on Lake Trasimene despite his victory at Cannæ (216) he was unable to take Rome, returned to Africa (203), and was defeated at Zama in 202 by Scipio Africanus, became chief magistrate at Carthage, but was compelled by the hostility of rivals to flee to the court of Antiochus, when his surrender was demanded by the Romans, he took refuge in Bithynia, and committed suicide.

Hannington, James (1847-86), Brit prelate 1st bishop of I. Equatorial Africa, (1884), murdered near Victoria Nyanza.

Hannu (about 500 B.C.), Carthaginian navigator, a supposed account of his voyage along the W coast of Africa is known as the "Periplus"

Hannu, Gabriel (born 1853), Ir statesman and historian, Foreign Minister (1894-95 and 1898-98), his most famous work is his "History of Contemporary France" (1903-8)

Harcourt, Lewis Harcourt, Viscount (1867-1922), Brit statesman, Colonial Sec (1910-15 and 1915-16)

Harcourt, Sir William Vernon (1827-1904), Brit statesman, professor of international law at Cambridge (1869-87) Home Sec (1880-85), Chancellor of Exchequer (1892-95), Liberal leader (1894-98)

Hardenberg, Karl August, Prince von (1750-1822), Prus statesman in 1790 when Ansbach-Bayreuth of which he was premier, was united to Prus he entered the service of the latter and superintended the campaign of 1791-94 concluded the treaty of Basle (1795), Foreign Minister (1804-5 and 1807) became Chancellor (1810) chief plenipotentiary of Prus at Congress of Vienna (1814-15)

Hardouin (1018?-42), King of Eng and Den, son of Anstr and Emma succeeded his half brother, Harold (1040), last of the Dan kings

Harding, Warren Gamaliel (1865-1923), 29th Pres of U.S.A., 1905

Hardinge of Penshurst, Charles, 1st Baron (born 1858), Brit statesman, Viceroy of India (1910-16), Ambassador in Paris (1920-22)

Hardy, Dudley (born 1867) Eng artist contributor to weekly periodicals, illustrator of books, and designer of posters

Hardy, Thomas (born 1840) Eng novelist, 1863

Hardy, Sir Thomas Masterman, Bart. (1769-1839) Brit admiral friend of Nelson, with whom he served at St Vincent, the Nile, and Trafalgar, became 1st Sea Lord (1840) and Governor of Greenwich Hospital (1834)

Hare, Augustus John Cuthbert (1834-1903), Eng author, has written many books of travel ("Walks in Rome")

Hare, Sir John (1844-1921) Eng actor after playing under the Bancrofts he came manager of the Court Theatre (1875) in 1878 he joined W. H. Kendal in the management of the St James' Theatre, lessee of the Garrick Theatre (1889-95)

Hargreaves, James (died 1778) Brit inventor invented the stock cards, and a hand-worked spinning jenny, 1769

Harland, Henry (1861-1909), Amer novelist, his works include "The Cardinal's Snuff Box" (1900), and "My Friend Prospero" (1904)

Harnsworthy, Alfred, Sr Northcliffe, Lord. Harnsworthy, Adolf von (born 1851) Ger theologian, his many works include "History of Dogma," "A History of Early Christian Literature," and "What is Christianity?"

Harold I (died 1040) King of Eng son of Canute, who left the succession to him, with his brother (1035) usurped the whole kingdom in 1037, having previously banished Queen Emma and murdered her sons by Athelred

Harold II (1026-66), King of Eng, succeeded Edward the Confessor, defeated the invasion of Harold Hardrada of Norway at Stamford Bridge (1066), defeated and slain by William of Normandy at Senlac, near Hastings

Harraden, Beatrice (born 1864), Eng novelist, her most famous book is "Ships that Pass in the Night" (1893)

Harris, Sir Augustus Henry Glossop (1852-90), Eng actor, managed Her Majesty's, Covent Garden, Drury Lane, and the Olympic Theatres at various times, Sheriff of London (1890-91)

Harris, Joel Chandler (1848-1908), Amer writer, in the *Atlanta Constitution*, of which he became editor, appeared in 1880 "Uncle Remus," followed by other similar works

Harrison, Benjamin (1833-1901), 23rd Pres of U.S.A. (1889-93)

Harrison, Frederic (1831-1928), Brit historian, author, jurist, literary critic,

and positivist philosopher, his many books include "The Meaning of History" (1862), "The Positive Evolution of Religion" (1912), and "Autobiographic Memoirs" (1911)

Harrison, William Henry (1778-1841), 9th Pres of U.S.A. (1840-41)

Hart, Sir Robert (1855-1911), Brit administrator, inspector-general of imperial Chinese maritime customs (1882-1907)

Hart, Francis Bret (1839-1902) Amer writer, his works include "The Heathen (hunc)" (1869), "Condensed Novels" (1867), "The Luck of Boaring Camp and Other sketches" (1870), and "A Ward of the Golden Gate" (1890)

Harvey, William (1578-1657), Eng physiologist, discovered the circulation of the blood, physician to James I and Charles I, warden of Merton College, Oxford

Hasdrubal (died 207 B.C.), Carthaginian soldier, brother of Hannibal, commanded in Sp with some success, but having invaded It was defeated and slain by Livius and Nero at the Metaurus

Haselbig, Sir Arthur (died 1861), Eng pearl soldier one of the "Five Members"

Hastings, Francis Rawdon-Hastings, 1st Marquess of (1754-1826), Brit general and statesman served in the Amer war, and was created Lord Moira opposed the Irish union, and was in 1815 made Governor General of India subdued the Marhattas and Pindaris advocated the education of the natives, and carried out many public works recalled (1822), governor of Malta (1824-28)

Hastings, Warren (1782-1818) Brit statesman, went to Bengal as a writer (1780) resident at Murshidabad (1788-91) returned to Eng (1784) became a member of the Council of Madras (1789), and in 1792 governor of Bengal, a position which in 1794 became that of Governor General of India, in order to obtain money, took measures against the Rajah of Benares and the Nawab of Oude which were afterwards charged against him, but left the affairs of the Company in a prosperous condition impeached before the Lords for crimes and misdemeanours, but acquitted (1795)

Hathaway, Anne (1556-1623), wife of William Shakespeare, whom she married in 1582

Hatten, Joseph (1841-1907) Eng novelist and journalist, works include "By Order of the Tur" and "The Old House at Sandwich"

Hauptmann, Gerhart (born 1862), Ger dramatist received the Nobel prize for literature (1912) ("Hannele", "The Weavers")

Hauptmann, Moritz (1792-1868) Ger composer works include an opera *Mathilde*

Havenshaw, Sir Henry (1796-1867) Brit general served in the first Burmese war (1825-26), held a command in the 1st Afghan war (1838-39) and afterwards served in the Marhatta and Sikh wars, became adjutant general in India (1854), and after commanding a division in the Persian campaign (1857), distinguished himself in the Mutiny by the relief of Lucknow

Havergal, Frances Ridley (1836-70), Eng poet and hymn-writer, wrote "Take my life and let it be"

Hawke, Edward Hawke, 1st Baron (1705-81), Eng admiral, gained several victories over Fr fleets, notably that of Quiberon (1759), 1st Lord of the Admiralty (1768-71)

Hawker, Robert Stephen (1803-75), Eng divine and poet vicar of Morwenstow, Cornwall (1834-76), wrote "Tendrils by Benben," "Cornish Ballads" (1860), "Echoes from Old Cornwall" (1845), "The Song of the Western Men," and "The Quest of the Sangraal" (1864)

Hawkins, Sir John (1832-95), Brit navigator, made three voyages for the purpose of procuring African slaves, but in the last was attacked and severely defeated by the Spaniards (1858), did much to reorganize the Eng fleet helped to fight the Armada (1588), when he was rear-admiral, afterwards made further attacks on the Spaniards, and died off Porto Rico 962, 963

Hawthorne, Nathaniel (1804-64), Amer novelist, his works include "The Scarlet Letter" (1850), "The House of the Seven Gables" (1851), and "Transcendentalism" (1860)

Hawley, Sir Charles (1858-1923), Eng actor, excelled in light comedy; best known in *The Prince's Secretary* and *Andrew Llewellyn's Adventure*

Hay, Ian (born 1876), pen-name of John Hay Beth, Scot novelist and dramatist, served with the Argyll and Sutherland Highlanders in the World War (1914-18), best known works include "The First Hundred Thousand", "A Safety Match", "Carry On", and (play) *Tully of Bloomsbury*

Hay, John (1838-1905), Amer diplomat and writer, ambassador to St Brit (1897-98), Sec of State (1898-1905), wrote "Pike Country Ballads" (1871)

Haydn, Franz Joseph (1732-1809), Austrian composer, 901, 92

Hayes, Rutherford Burehard (1822-93), 19th Pres of U.S.A.

Hayter, Sir George (1792-1871), Brit artist, his "Trial of Lord Russell," exhibited in 1825, made his reputation, appointed portrait and historical painter to Queen Victoria (1837)

Hazlitt, William (1778-1830), Eng critic and essayist, son of a Nonconformist minister, published his "Essay on the Principles of Human Action" (1808), after which he contributed to the *Examiner* many essays, including "The Round Table" (1817), "Table Talk" (1821), and "The Spirit of the Age" (1825), also wrote "Characters of Shakespeare's Plays" (1817), "View of the Contemporary English Stage" (1818), and a *Life of Napoleon* (1828-30)

Hazlitt, William Carew (1834-1913), Eng author, his works include "Memoirs of William Hazlitt" (1867), and "Faith and Folklore" (1905)

Healy, Timothy Michael (born 1855), Governor General of the Irish Free State

Hearn, Lafcadio (1856-1904), author, professor of Eng in Tokyo Univ (1896-1903), his works include *Glimpses of Unfamiliar Japan* (1894), and *Japan* (1904)

Heathfield, George Augustus Eliott, 1st Baron (1717-90), Brit general, served with Prus army (1735-38), fought at Dettingen and Fontenoy in Brit army governor at Gibraltar (1775-79) during the famous siege

Heaton, Sir John Henniker (1848-1914), Brit politician by his efforts imperial penny postage was adopted (1869), and extended to U.S.A. (1907)

Heber, Egonald, D.D. (1785-1826), Brit prelate and hymn writer, Bishop of Calcutta (1822-26)

Hedin, Sven Anders (born 1865), Swed explorer, travelled to Persia, Khorasan, Turkestan, Tibet, Mongolia, and Siberia

Hegel, Georg Wilhelm Friedrich (1770-1831), Ger philosopher, published "Phänomenologie des Geistes" (1807), rector of the Nurnberg gymnasium (1808-16), when he obtained a professorship at Heidelberg, removing two years later to Berlin, chief works are "Wissenschaft der Logik" (1812-16), "Encyclopaedie der philosophischen Wissenschaften" (1817), and "Philosophie des Rechts" (1821)

Hegyllyus (2nd cent.), ecclesiastical historian, author of "Hypomnemata," earliest history of the Christian Church

Heme, Heinrich (1797-1856), Ger poet born at Dusseldorf of Jewish parents renounced Judaism (1826), and after 1830 lived at Paris, his chief works are "Buch der Lieder" (1827), "Rosenblätter" (1825-31), "Der Salon" (1834-40), "Deutschland und Wintermärchen" (1844), and "Atta Troll" (1876)

Heliogabalus (204-22) Rom Emperor notorious for his eccentricity and cruelty, making himself a god and his horse consul

Helmholtz, Hermann von (1821-94), Ger physicist held professorships of physiology at Konigsberg, Bonn, Heidelberg, and Berlin, invented a mirror for studying the retina of the living eye

Helvetius, Claude Adrien (1715-71), Fr

- philosopher his chief work *De l'Esprit* (1758) was condemned to be burnt
- Hemans, Felicia Dorothea** (1793-1835) Eng poet wrote *Hymns for Childhood* (1834) *Casabianca* etc
- Henderson, Alexander** (1583-1646) Scot divine author of the *Solemn League and Covenant* (1643)
- Henderson, Arthur** (born 1868) Brit labour leader *Home Sec* (1924)
- Hengist** (died 488) Saxon chief with his brother Horsa landed in the Isle of Thanet (449) at first supported the Britons against the Picts and Scots but afterwards quarrelled with his allies Horsa was killed at Avnerford but his brother conquered Kent and founded a kingdom
- Hensley, William Ernest** (1849-1903) Brit poet critic and dramatist (London *Voluntaries* *Hospital Sketches*)
- Henricus Maria** (1609-69) Queen of Charles I of In. daughter of Henry IV of Fr
- Henry I** (1068-1135) King of Eng youngest son of William I seized the throne on the death of William II (1100) abolished the curfew and established the court of exchequer and a standard of weights and measures his charter was the foundation of the Great Charter
- Henry II** (1133-89) King of In. acquired by marriage Guenne and Poutou put down private war and jurisdictions and subdued the last great feudal rising engaged in a long quarrel with Becket sanctioned the first expedition against Ireland afterwards accepting the kingdom the most important enactments of his reign were the Assizes of Clarendon and Northampton and the Assize of Arms also the grant of town charters
- Henry III** (1207-72) King of Eng came to the throne (1216) provoked much discontent culminating in the Barons war in which he was defeated at Lewes (1264) and compelled to submit to De Montfort who was afterwards slain at Evesham (1265) the Great Charter (with important clauses omitted) was frequently renewed
- Henry IV** (1367-1413) King of Eng deposed Richard II (1399) by whom he had been banished Paris exercised a firm control over the Govt
- Henry V** (1387-1422) King of Eng succeeded 1413 twice invaded Ir and won the battle of Agincourt (1415)
- Henry VI** (1421-71) King of Eng succeeded (1422) son of Henry V during reign all the Eng dominions in Ir except Calais were lost the rising of aids took place and the wars of the Roses raged king deposed imprisoned and probably murdered
- Henry VII** (1457-1509) King of Eng first of Tudor dynasty invaded Eng (1485) and defeated Richard III at Bosworth reign marked by three Yorkist marriages which he defeated
- Henry VIII** (1491-1547) King of Eng succeeded 1509 married Catherine of Aragon wife of his deceased brother his divorce from whom was the proximate cause of the Reformation early years of the reign marked by a war with Ir unsuccessful attempts at union with Scot were made a system of balance was maintained in foreign relations the Crown gained control over the Church the rising called the Pilgrimage of Grace was suppressed and the king became practically absolute
- Henry I** (876-936) Ger king granted 1st municipal charters repulsed Danes, Hungarians and Huns
- Henry II** (973-1024) Ger king and Rom emperor succeeded Otto as emperor last of the House of Saxony
- Henry III** (1017-56) Ger king and Rom emperor nominated three Gers to the papacy and invested the Normans with the duchy of Calabria waged successful wars with the Hungarians and Bohemians
- Henry IV** (1050-1106) Ger king and Rom emperor deposed Pope Gregory VII, but was himself excommunicated and deposed and was obliged to submit at Canossa in 1076 in 1084 he again invaded It, and captured Rome de throne by his son Henry
- Henry V** (1081-1125) Ger king and Rom emperor dethroned his father Henry IV 1st husband of Matilda daughter of Henry I of Eng
- Henry VI** (1166-97) Ger king and Rom emperor succeeded his father Frederick I (Barbarossa) (1190) imprisoned Richard I of Eng and conquered Apulia and Sicily
- Henry VII** (1269?-1313) Ger king and Rom emperor invaded It subdued the Lombards restored the Visconti at Milan and acquired Bohemia by marriage
- Henry I** (1008-60) King of Fr succeeded (1031) engaged in constant war more particularly with William Duke of Normandy
- Henry II** (1519-59) King of Fr succeeded (1547) by his alliance with the Ger Protestants acquired Metz Toul and Verdun regained Calais from the Eng
- Henry III** (1551-89) King of Fr succeeded (1574) at first took part against the Huguenots forced to leave Paris he besieged the city in alliance with the Huguenots and Henry of Navarre when he was assassinated
- Henry IV** (1553-1610) King of Fr founder of the Bourbon dynasty succeeded (1589) his marriage with Marguerite de Valois (1572) was occasion of massacre of St Bartholomew left court (1576) and became leader of the Huguenots and opponent of the League being the rival of the Gueses for the succession defeated them at Arques and Ivry but was unable to conquer Paris without becoming a Rom Cath which he did in 1593 concluded peace with Philip II of Sp and issued the Edict of Nantes
- Henry of Portugal** (1394-1460) the Navigator fourth son of King John of Port directed the voyages which discovered Madeira and the mouth of the Senegal made an expedition against Tangiers and invented the astrolabe
- Herbert, George** (1833-333) Eng poet and divine wrote *The Temple* and *The Country Parson*
- Herbert of Lea, Sidney Herbert, 1st Baron** (1810-61) Brit statesman secretary to the Admiralty (1841-45) sec of War (1845-1845-55 and 1859-61)
- Herder, Johann Gottfried von** (1744-1803) Ger philosopher and poet court preacher and councillor at Weimar chief works were *Voices of the Nations* in Song (1778-79) and *Ideas on the Philosophy of the History of Mankind* (1784-91)
- Hereward, called The Wake** Eng squire who held the Isle of Ely against William the Conqueror (1070-71)
- Heckener, Sir Hubert von** (1849-1914) Brit artist son of a wood carver at Weil Bayern exhibited at the Academy *The Last Winter* (1870) founded School of Art at Bushey (1883) Slade professor at Oxford (1885-94)
- Herod** (37-4 B.C.) called the Great King of Judaea put to death his wife Mariamne and two sons rebuilt the Temple at Jerusalem
- Herod Antipas** (1st cent.) son of Herod the Great became Tetrarch of Galilee (4 B.C.) beheaded John the Baptist deposed and exiled in 39
- Herodotus** (5th cent.) Gk historian wrote a *History of Rome*
- Herodotus** (480 B.C.-425?) Gk his torian travelled in Eg Palestine and Babylon from his famous *History* called the father of history
- Herrick, Robert** (1591-1634) Eng poet studied law afterwards took orders and obtained a crown living in Devonshire ejected (1648) reinstated (1662) his chief work is *Hesperides* (1633)
- Herriot, Edouard** (born 1872) Fr statesman held office as Minister of Food for short period during World War was Prime Minister (1924-5)
- Herschel, Caroline** (1750-1848) Eng astronomer 406
- Herschel, Sir John F W** (1792-1871) Eng astronomer son of Sir Wm Herschel, 406, 410
- Herschel, Sir William** (1738-1832) Eng astronomer 406
- Hertling, Georg Friedrich von, Count** (1843-1913) Ger statesman Imperial Chancellor (1917-18)
- Hertz, Heinrich Rudolf** (1857-94) Ger physicist his experiments while at Karlsruhe technical school confirmed Maxwell's theory of the existence of ether or Hertzian waves his other wave work made wireless telegraphy possible 2, 3
- Hesiod** (8th cent B.C.) Gk poet author of *Works and Days* and *Theogony*
- Hewlett, Maurice Henry** (1861-1923) Brit novelist and poet works include *The Forest Lovers* (1898) *The Queen's Quair* (1904) and *Mamming* (1921)
- Heyse, Paul Johann Ludwig** (1830-1914) Ger poet and novelist awarded Nobel prize for literature works include *Francesca of Rimini* (1880) and *Elizabeth Charlotte* (1890)
- Heywood John** (1497-1580?) Eng poet and epigrammatist his chief work *The Spider and the Flea* (1506)
- Heywood, Thomas** (died 1830?) Eng dramatist and actor chief plays *A Woman Killed with Kindness* (1807) *The Captives* (1804) and *The English Traveller* (1830)
- Hosekiah, King of Judah** succeeded Josiah about 726 B.C. defeated invasion of the Assyrians
- Housman, Robert Smythe** (born 1864) Brit novelist and dramatist works include *The Garden of Allah* (1905) *The Fall of the Hood* (1906) and *Bull's Donna* (1909)
- Hicks, William** (1810-82) Brit soldier usually known as Hicks Pasha served in Russia (1812-13) in the Rostom campaign the Mutiny and the Abyssinian war appointed chief of the staff in the Sudan (1883) in Sept 1883 his army was surrounded and destroyed while on the march through the desert to Khartoum
- Hilditch, James, Eng** engineer friend of Sir Alfred Yarrow 270-271
- Hill, Octavia** (1835-1911) Eng social reformer with the help of Ruskin purchased and managed poor property in London part founder of the Charity Organisation Society
- Hill, Rowland** (1744-1833) Eng divine took orders but opened an independent chapel in Blackfriars Road London (1783)
- Hill, Sir Rowland** (1771-1842) Eng administrator founder of the penny post 319
- Hill Rowland Hill 1st Viscount** (1773-1842) Brit general distinguished himself in the Peninsular War and at Waterloo commander in chief (1828-42)
- Hindenburg, Paul von** (born 1847) Ger general served in Austro-Hungarian War (1866) Franco-Prussian War (1870-71) and World War (1914-18) commander in chief (1916-18) 1st of Ger republic (1918-19)
- Hipparchus** (about 150 B.C.) Gk astronomer inventor of trigonometry
- Hipper, Vice-admiral von** (1811-1860) was in charge of the cruiser squadron in battle of Dogger Bank (1915) and Jutland (1916) 42
- Hippocrates** (460-370 B.C.) Gk physician laid the foundation of a scientific medicine wrote *The Nature of Man* *Epidemics* *Aphorisms* and other works
- Hiscock, Sir Samuel John Gurney** (born 1880) Brit politician appointed sec for Air (1921- and 1924)
- Hobbes, Thomas** (1588-1633) Eng philosopher met Descartes and Gassendi at Paris when tutor to members of the Devonshire family was afterwards mathematical tutor to Prince Charles (Charles II) chief works *Leviathan* *De Cive* and *Behemoth*
- Hobhouse, Arthur, Baron** (1819-1904) Brit lawyer appointed Charity Commissioner (1860) and member of the Council of India (1872) member of the judicial committee of Privy Council (1881-1901)
- Hofer, Andreas** (1767-1810) Tyrolean patriot headed the revolt by which the Bavarians were driven from Tyrol (1809) afterwards captured by the Fr and shot

Hoffmann, Ernst Theodor (1776-1822) Ger novelist and musician the opera *Undine* was the best of his musical works
Hogarth, William (1697-1764) Eng artist his works include 'The Rake's Progress' (1735), 'Marriage à la Mode' (1745) and numerous portraits and caricatures wrote 'The Analysis of Beauty' (1754)
Hogg, Sir Douglas (born 1872) Brit politician appointed Attorney General (1922 and 1924)
Hogg, James (1770-1831) Scot poet called the 'Ittrick Shepherd', was a cowherd and for ten years a sheep herder his chief works are 'The Mountain Bard' (1801) and a collection of poems (1822)
Holbach, Paul Heinrich Dietrich, Baron d (1732-88) Fr philosopher wrote 'Le Christianisme', 'Le Système de la Nature', 'Méthode de la morale', etc.
Holbein Hans (1480-1524) Ger painter most of his pictures are of religious subjects
Holbein Hans (1473-1543) Ger painter architect and engraver principal painter to Henry VIII probably introduced miniature painting into England some of his finest work is in the National Gallery
Hole, Samuel Reynolds (1819-1904) Brit divine Dean of Rochester (1887-1904). A Book about Rows is his most famous book
Holmehead Raphael (died 1800?) Eng historian published 'Chronicle of England Scotland and Ireland' (1789)
Holland Henry Richard 2nd Baron (1773-1840) Brit statesman member of the House of Commons Chancellor of the Duchy of Lancaster (1830) left Member of the Whig Party and other works
Holland Henry Scott (1847-1918) Brit divine Canon of St Paul's (1884-1910) rigorous professor of divinity at Oxford (1910-14)
Holman Oliver Wendell (1809-94) Amer essayist and poet known medical director in Paris (1836) 'The Autocrat at the Breakfast Table', 'The Professor at the Breakfast Table' and 'The Lord at the Breakfast Table' first appeared in the 'Atlantic Monthly'
Holyoake George Jacob (1817-1906) Brit rationalist supporter of Co-operation on which he was active in Athens (1841) he produced pamphlets and books
Homer reputed author of the Iliad and Odyssey
Honorius I (died 139) Pope (62-638) succeeded Innocent I
Honorius III (died 1138) Pope (1118-27) succeeded Innocent III supported the crusades against the Albigenses
Hoof Horace Lambert Alexander (1870-1916) Brit sailor distinguished himself in command of the hit battle cruiser squadron at the battle of Jutland while he went down in his flag ship the *Invincible*
Hood Samuel, Viscount (1724-1816) Brit admiral received prestige for his share in Rodney's victory over the Fr off Dominica (1781) blockaded Toulon and reduced Bastia (1794)
Hood Thomas (1798-1845) Brit poet among his chief works are 'Whims and Oddities', 'The Comic Annual', 'Miscellaneous', and various pieces of which the 'Song of the Shirt' and the 'Brick of Bicks' are the best known
Hook Theodore Edward (1788-1841) Brit novelist and wit accountant general of the Mauritius but his careerless general to his arrest while in prison (1828-29) he edited *John Bull* his novels include 'Jack Brag' (1837) and 'Births, Deaths and Marriages' (1839)
Hooker, Richard (15 to 1600) Eng theologian wrote 'Laws of Ecclesiastical Polity'
Hooper, John (died 1555) Eng divine after being a Carthusian monk joined the reformers Bishop of Gloucester (1551) Bishop of Worcester and Gloucester (1555) burnt at the stake
Hopner, John, RA (1759-1810) Eng artist, self taught portrait painter A RA (1792) RA (1795)

Horace (65-8 B.C.) Rom poet full name Quintus Horatius Flaccus taught at Philippi (42 B.C.) on the republican side introduced by Virgil to the notice of Augustus and Maecenas regained his confiscated property chief works 'Odes' and 'Epodes', 'Epistles', 'Satires' and 'Ars Poetica'
Horne, Charles Sylvester (1865-1914) Brit preacher and politician minister of Whitefield's Tabernacle London (1908-14) Liberal M.P. for Ipswich (1910-14)
Horrocks, Jeremiah (1619-41) Eng astronomer was the first to observe the transit of Venus and formed a theory of lunar motion afterwards adopted by Newton
Horatius, Quintus (114-50 B.C.) Rom orator colleague of Cicero as augur and consul (69 B.C.)
Hotchkiss, Benjamin Beckley (1826-85) Amer inventor of gun which bears his name
Houghton, Richard Monckton Milnes, Baron (1809-85) Brit writer and politician M.P. (1837-69) works include 'Memories of Many Seasons' (1840) 'Poetry for the People' (1940) 'Palm Leaves' (1844) and 'Monographs Personal and Social' (1878)
Housman, Laurence (born 1865) Brit writer her best known works include 'A Shropshire Lad' (1896) 'An Englishman's Love Letters' (1900), and 'Lyric Poets' (1910)
Howard, Catherine (died 1642) 5th Queen of Henry VIII of Eng accused of infidelity by Archbishop Cranmer found guilty and beheaded on Tower Hill seventeen months after her marriage
Howard, Ebenezer (born 1850) founder of the Garden City 1885
Howard of Effingham, Charles, 2nd Baron (1538-1642) Brit admiral commanded Eng fleet which opposed the Armada (1588) captured Cadix (1594) and became 1st Earl of Nottingham
Howe, Richard, Earl (1726-99) Brit admiral won great victory over the Fr off Ushant (1794) First Lord of the Admiralty (1783-88)
Howe, William, 5th Viscount (1729-1814) Brit general in Amer War of Independence won the battle of Long Island (1776) took New York defeated Washington at Brandywine (1777) and repulsed him at Germantown resigned (1778)
Howells, William Dean (1837-1920) Amer writer editor of *The Atlantic Monthly* (1871-80) works include 'The Lady of the Aroostook' (1879) 'A Modern Instance' (1882) 'Modern Italian Poets' (1888) and 'The Vocation of the Keltynas' (1920)
Hudson, Henry (1570-1611) Eng sailor 933
Hudson, William Henry (1801-1922) Brit naturalist and writer works include 'The Naturalist in La Plata' (1892) 'Birds in London' (1899) and 'Far Away and Long Ago' (1918)
Hughes, David Edward, pioneer of wireless telegraphy 2
Hughes, Thomas (1822-96) Brit writer chief works 'Tom Brown's School Days' (1867) and 'Tom Brown at Oxford' (1861)
Hugo, Victor-Marie (1802-85) Fr poet and romance writer 686
Hulk, Jonathan (born 1699) inventor of first Eng steamboat 1945
Humbert I (1044-1000) King of It distinguished himself as Prince of Piedmont in the Aus war succeeded Victor Emmanuel (1878) assassinated
Humboldt, Friedrich Heinrich Alexander, Baron von (1769-1859) Ger scientist with Aimé Bonpland explored S Amer and Cuba (1799-1804) crossed Siberia (1829) chief work 'Kosmos'
Humboldt, Karl Wilhelm von (1767-1835), Ger philologist and statesman, went as minister to Rome (1802) but soon returned to Berlin of whose university he was one of the chief founders when minister of public instruction, signed capitulation of Paris (1815), was at Frankfurt (1818) and at the Congress of Aix la Chapelle (1818)

Hume, David (1711-76) Scot philosopher and historian wrote 'Treatise on Human Nature' (1739), 'Essays Moral and Political' (1741) 'History of England' (1754-62) and the 'Natural History of Religion' (1755)
Hunt, Holman (1827-1910), Eng painter, 1821, 215, 465
Hunt, James Henry Leigh (1764-1859) Brit essayist and critic became (1806) editor of the *Examiner* fined and imprisoned (1813-15) for attack on the Regent went to it to join Byron and Shelley in the establishment of a magazine (1821) works include 'Rimini' (1816) 'The Religion of the Heart' (1853) 'Byron and His Contemporaries' (1828)
Huss, or Hus, Johann (1373-1415) Bohemian reformer attacked abuses in Church and State excommunicated by Pope John XXIII for giving adhesion to Wycliffe's doctrines and afterwards wrote his 'Tractatus de Ecclesia' went to the Council of Constance under a safe conduct but his enemies procured his imprisonment as a heretic and he was burnt
Huxley, Thomas Henry (1825-95) Brit biologist 1173
Hyde, Anne (1637-71) first wife of James, Duke of York (afterwards James II), daughter of Lord Clarendon
Hyndman, Henry Mayers (1842-1921) Brit socialist founded the Social Democratic Federation (1881) works include 'The Future of Democracy' (1915) and 'The Evolution of Evolution'
Hypatia (370?-415) Gk philosopher and mathematician daughter of Theon head of the Platonic school of Alexandria gave public lectures on philosophy but was murdered by mob
Hyperides (died 322 B.C.) Athenian orator disciple of Plato is thought to be the author of one of the 'Philippics' of Demosthenes whose banishment he procured put to death by Antipater
Iamblichus (died 330?) Neoplatonic philosopher disciple of Porphyry born at Chalcis Syria among his works is a 'Life of Pythagoras'
Ibsen, Vilhelm Blase (born 1867) 9p novelist his best known novel is 'The Four Horsemen of the Apocalypse' an epic of the World War others include 'Blood and Sand' denouncing the career of a bull fighter and 'The Shadow of the Cathedral'
Ibrahim Pasha (1789-1848) Eg soldier succeeded father Mehmet Ali (1848), but reigned only two months
Ibsen, Henrik (1828-1906) Nor dramatist 745
Rhymus (6th cent B.C.) Gk lyric poet only fragments of his poems remain
Idelburg (Stafford Henry Northcote), 1st Earl of (1818-87) Brit statesman Pres of the Board of Trade (1866-68) transferred to the India Office (1868) Chancellor of the Exchequer (1874-80) first Lord of the Treasury (1886) Foreign Sec (1886)
Ignatieff (Nicholas Pavlovitch), Count (1882-1908) Rus statesman ambassador at Constantinople (1864-77) Minister of the Interior (1881-82)
Ignatius (died 107?) saint and martyr, became Bishop of Antioch about 69 during the persecution under Trajan was taken to Rome and suffered death wrote epistles to the churches in Asia concerning which there has been much controversy
Ignatius, Father (1837-1908), Brit divine real name Joseph Leycester Lyne, established an Anglican Benedictine community at Llanthony Abbey (1870)
Immermann, Karl Leberecht (1796-1840) Ger dramatist and poet author of 'The Princess of Syracuse' (1821) 'Kung Persander' (1823), etc.
Inabath, Elizabeth (1753-1821) Eng actress novelist and dramatist her 'Simple Story' (1791) and 'Nature and Art' (1796), rank high among works of fiction
Inge, William Ralph (born 1866), Brit divine, Lady Margaret professor of

INGELOW

divinity at Cambridge (1907-11) Dean of St Paul's (1911)

Ingelew, Jean (1820-97) Brit poet and novelist works include *Off the Skelligs* (1872) *Tales to be Told* (1878) and three series of Poems

Ingeuhl, Friedrich von (born 1857) Ger admiral commander in chief of High Seas Fleet (1913-15) fought battle of the Dogger Bank (1915)

Inglis, Eliza Maude (1864-1917) Scot doctor 1886

Ingres, Jean Dominique Auguste (1780-1867) Fr artist painted the Apotheosis of Homer the source and other works in the classical style

Innocent I (died 417) Pope (402-17) supported Chrysostom and excommunicated Pelagius

Innocent II (died 1143) Pope (1130-43) expelled from Rome by the supporters of Anacletus II excommunicated his rival (1134) reinstated by the Emperor Lothar (1138)

Innocent III (1160-1216) Pope (1198-1216) aimed at making the papacy supreme in all European affairs deposed the Emperor Otto (1211) his dispute with John of England culminated in the appointment of Langton to the see of Canterbury lasted from 1207 to 1213 when John admitted Langton and surrendered King to the Pope at the same time it carving it back as a papal fief instigated the Albigensian persecution (1214) proclaimed the 5th crusade (1215)

Innocent IV (died 1254) Pope (1243-54) forced by Frederick II to retire to Lyons (1244) after the emperor's death (1250) Innocent returned to Rome now confided with Frederick's sons Conrad IV and Manfred of Sicily finally deposed by the latter (1264)

Innocent V (1258-60) 1st Dominican Pope (1268)

Innocent VI (died 1362) Pope (1352-62) sought the reunion of Christendom

Innocent VII (1399-1406) Pope (1404-06) succeeded Boniface IX

Innocent VIII (1482-92) Pope (1484-92) succeeded Sixtus IV

Innocent IX (1591-91) Pope (1591) succeeded Gregory XIV

Innocent X (1644-55) Pope (1644-55) issued a bull condemning the propositions of Jansen (1653) 1303, *pastor* 1510

Innocent XI (1655-69) Pope (1667-69) involved in dispute with Louis XIV against the encroachments of Fr

Innocent XII (1691-1700) Pope (1691-1700) succeeded Alexander VIII

Innocentius (4th cent BC) Athenian general gained a victory over the Spartans near Corinth (392) saved by arts when attacked by Lamachus (386) during the social war took part in an expedition against Byzantium

Irene (752-803) E Rom empress after the death of her husband acted as regent for her son Constantine (780-90) usurped the throne (797) by depriving Constantine of his right banished (803)

Ireton, Henry (1611-51) Eng soldier commanded the left wing of the Puritan army at Marston (1646) married Cromwell's daughter Bridget (1648) took part in the trial and condemnation of Charles I accompanied Cromwell to Ireland and remained there as lord deputy

Irving, Edward (1792-1834) Scot divine founder of the Catholic Apostolic Church

Irving, Sir Henry (1838-1905) Brit actor 75

Irving, Washington (1783-1866) Amer author sec to the Amer embassy in London (1828-31) US minister to Sp (1842-46) among his works are Knickerbocker's History of New York (1809) *The Life of Columbus* (1828) *The Chronicle of the Conquest of Granada* (1824) and *Life of Goldsmith* (1844) Mahomet (1850) and Washington (1855-59)

Isaac Hebrew patriarch son of Abraham and Sarah married Rebekah and settled at Gerar in the country of the Philistines

Isaac I (Comnenus) (died 1061) E Rom Emperor chosen in place of Michael VI (1057) became a monk (1053)

Isaac II (Angelus) (died 1204) E Rom Emperor succeeded Andronicus I (1185) deposed and imprisoned by his brother Alexius (1195) recovered throne (1203)

Isabella I (1451-1504) Queen of Castile married Ferdinand of Aragon (1469) succeeded her brother Henry IV on the throne of Castile (1474) promoted the expedition of Columbus

Isabella II (1830-1904) Queen of Sp succeeded her father Ferdinand VII (1833) married Don Francis d'Assis (1843) abdicated in favour of her son Alfonso XII (1870)

Isabella (12th-1358) Queen of Eng daughter of Philip IV wife of Edward II induced Earl to depose her husband and to proclaim Edward III as king with her lover Roger Mortimer as regent in 1330 she and her lover were seized and Isabella spent the remainder of her life at Castle Rising Norfolk

Isaiah (7th cent BC) Hebrew prophet passed his life at Jerusalem where he is said to have been slain asunder by King Manasseh

Isidore St (560-648) Sp prelate Bishop of Seville renowned for his learning wrote a History of the Gothic Vandals and Sueves

Ismael Pasha (1830-96) Khedive of Eg introduced many reforms but burdened the country with debt deposed (1879)

Isocrates (436-338 BC) Athenian orator on hearing of the battle of Chaeronea committed suicide by starvation twenty one of his orations remain

Israel Joseph (1814-1911) Dutch artist painted portraits and pictures dealing with peasant and seafaring life

Ito Prince Hirobumi (1841-1909) Jap statesman four times premier drafted constitution (1889) assassinated

Ishmael, Augustus de (1783-1814) Emperor of Mex helped to secure Mex independence proclaimed emperor (1814) killed by the Republican party (1823) outlawed and shot

Ivan III (1440-1505) Grand Duke of Muscovy surnamed the Great succeeded (1462) freed Rus from the Tatars

Ivan IV (1530-84) Tsar of Rus surnamed the Terrible came to the throne (1547) drove Tatars from Kazan Astrakhan and W Siberia

Jackson Andrew (1797-1845) Amer gen and statesman suppressed the Creek Indians (1818) was elected 7th pres in 1829 and re-elected 1832

Jackson, Frederick George (born 1860) Brit explorer commanded the Jackson Harnsworth Expedition that explored Franz Josef Land (1894-97)

Jackson Thomas Jefferson (1824-63) Amer gen known as Stonewall Jackson gained his nickname by standing like a stone wall at the battle of Bull Run (1862)

Jacob Heb patriarch son of Isaac and Rebekah also named Israel whence his descendants are called Israelites or Children of Israel

Jacobi Abraham (1830-1919) Ger Amer physician pioneer in study of children's diseases

Jacobs William Wymark (born 1863) Eng novelist among his humorous stories are *Many Carriages* *The Skipper's Wooing* and *At Sunning Fort* his *Monkey & Paw* was dramatized

Jacquard, Joseph Marie (1732-1834) Fr mechanician, inventor of the Jacquard loom 1288

James, St (died AD 44) son of Zebedee one of the 12 apostles put to death by Herod Agrippa

James, St (died AD 62) traditional author of the epistle which bears his name he came Bishop of Jerusalem

James, St, one of the 12 apostles son of Alphaeus called the Little to distinguish him from the son of Zebedee

James I of England and VI of Scotland

JEFFERSON

(1606-1625) son of Mary Queen of Scots and Darnley proclaimed King of Scots on abdication of his mother (1607) and became King of Eng (1608) firm believer in divine right of kings and in his own kingship aroused jealousy by attempting to secure closer union of his two kingdoms alienated Puritans as well as Catholics and quarrelled with Parliament having failed to marry his son to a Span princess declared war on Sp his writings include *Barthron Doron* and *Counterblasts to Tobacco*

James II (1633-1701) King of Gt Brit and Ir 2nd surviving son of Charles I a Cath himself he attempted to restore Catholicism as the religion of Eng at the glorious revolution of 1688 when William of Orange was invited to take the throne of Eng James fled to Fr in 1690 defeated at the battle of the Boyne spent rest of his life in exile in Fr

James I (1594-1625) King of Scot was taken prisoner by the Eng while on his way to Fr (1606) in captivity he composed his poem *The King's Quair* celebrating his courtship of his future wife Lady Jane Beaufort on his release (1614) he had the Duke of Albany and other nobles executed he was assassinated

James II (1430-60) King of Scotland son and successor of the preceding engaged in a struggle with the Douglas family and supported Henry VI of Eng was slain while besieging Roxburgh castle

James III (1451-88) King of Scotland son and successor of the preceding he was killed while fleeing from Sauchieburn after his army had been defeated

James IV (1473-1513) King of Scotland succeeded his father (1488) invaded Eng and was defeated and slain at Flodden

James V (1512-42) King of Scotland son and successor of the preceding married Mary of Guise (1538) and was unsuccessful in his war with the Eng after the defeat of Solway Moss he died of a broken heart

James (James Francis Edward Stuart) (1688-1766) called the Chevalier of St George or the Old Pretender son of James II and Mary of Modena in 1717-1745 and at other times attempted unsuccessfully to secure the throne of Gt Brit spent the last years of his life as a religious recluse

James Henry (1843-1916) Anglo Amer novelist lived in Europe among his novels are *The Europeans* *Daisy Miller* *The Awkward Age* and *The Golden Bowl*

James William (1841-1910) Amer psychologist brother of Henry James his writings include *Pragmatism* and *Principles of Psychology*

Jamieson Sir Alexander Starr (1863-1917) Scot physician leader of the Jamieson Raid on the Transvaal 1899, became leader of S Africa Progressive Party prime minister of the Cape of Good Hope (1904-8) 32, 33, 34

Jansen, Cornelius (158-1638) Dutch theologian founder of Jansenism became Bishop of Ypres (1636) he was a follower of St Augustine and wrote *Augustinus* controverting the doctrine of the Jesuits

Jaurès Jean Léon (1859-1914) Fr socialist assassinated by a fanatic for his opposition to Fr participation in the World War

Jay, John (1745-1829) Amer jurist and statesman appointed chief justice of the Supreme Court of the USA (1801) in 1794 concluded the Jay treaty between Gt Brit and USA

Jebb, Sir Richard Claverhouse (1841-1905) Brit classical scholar professor of Gk at Glasgow Univ and Megius Professor of Gk at Cambridge Univ edited *Sophocles* and wrote a *Life of Bentley* etc

Jeffries, John Richard (1848-87) Eng naturalist and author wrote *The Gamekeeper at Home* *The Amateur Poacher* *Life of the Field* *Wood Magic* *Amoryllis* at the Bur and other charming sketches of country life

Jefferson Thomas (1743-1826) Amer statesman was elected to the Con

tinental Congress (1775) and helped to draw up the Declaration of Independence became leader of the Republican party and was elected vice-pres. (1798) he was pres. (1801-9)

Jeffreys, George, Baron (1648-89) Eng. judge, became Chief Justice of the King's Bench (1683) and Lord Chancellor (1685) notorious for his cruelty in punishing the adherents of the Duke of Monmouth the so-called bloody assize

John, King of Israel while an officer in Ichoram's army was anointed king over Israel murdered Ichoram and married the house of Ahab a furious driver (2 Kings 10) hence nickname for a coachman

Jellicoe, John Rushworth Jellicoe, 1st Viscount (born 1859) Brit. sailor at the outbreak of the World War appointed commander in chief of the Grand Fleet after the battle of Jutland became 1st Sea Lord retired (1917) and appointed Gov. Gen. of New Zealand (1920)

Jenghis Khan (1162-1227) Mongol emperor first to unite the Mongol race to whom proclaimed himself emperor in 1206 and by his conquests ruled from the China Sea to the Danube

Jenner, Edward (1743-1823) Eng. physician discoverer of vaccination 1827

Jenson, Nicolas (1740-1800) early Fr. printer and publisher 592

Jeremiah (7th cent. B.C.) one of the major Hebrew prophets

Jerome, St. (340-420) Father of the Church spent the last years of his life in a monastery at Bethlehem here he completed his translation of the Bible from Hebrew into Latin

Jerome of Prague (1359-1410) Bohemian religious reformer became an ardent supporter of John Huss imprisoned and induced to recant he afterwards maintained his views boldly to the stake

Jerome Jerome Klapka (born 1859) Eng. humorist and dramatist won success originally with *Three Men in a Boat* founded the *Joker* with Robert Barr his other books include *The Idle Thoughts of an Idle Fellow* and *The Master of Mrs. Chivers* and his best known play is *The Pawns of the Third Floor Back*

Jerrold, Douglas William (1803-57) Eng. dramatist and humorous writer wrote many plays of which *Black Lyd Swan* (1829) is the best known central idea to *Punch* where his greatest success was Mrs. Tuppence's Curtain Lectures

Jesse, father of David the first of Jesse representing in the form of a genealogical tree the descent of Jesus Christ from Jesse is often seen on stained glass windows

Jevons, William Stanley (1835-82) Eng. economist and logician became professor of political economy at University College London (1876) wrote *Theory of Political Economy* *Primer of Political Economy*

Jezabel, idolatrous daughter of Ethbaal king of the Sidonians and wife of Ahab murdered by order of Jehu

Jochum, Joseph (1831-1907) Hungarian violinist played regularly in Eng. (1849-99) called the king of violin 1-4 1238, 1239

Job of Aves (141-31) Fr. heretic 120

Job, long suffering, hero of the Book of Job in the O.T.

Jeffre, Joseph Jacques Césaire (born 1812) Fr. soldier after serving in the Fr. colonies in Africa and Asia was made at the outbreak of the World War (1914) commander of all the Fr. forces on the western front instrumental in winning the first battle of the Marne in 1916 retired and made marshal

John (1167-1216) king of Eng. nicknamed Lackland ruled from 1199 one of the most hated of Eng. monarchs he was forced to sign *Magna Charta* at Runnymede in 1215 the following year he died while marching against Louis the Dauphin to whom the barons had offered the crown

John, St., the Apostle, son of Zebedee one of the earliest of Christ's disciples during the crucifixion our Lord commanded that he be crucified

Hopkins Baptist, the forerunner of Jesus Christ, son of Mary wrote he lived A.R.A. 14

in the wilderness of Judea proclaiming Christ's coming preaching repentance and baptizing with water on the banks of the Jordan our Lord there received baptism at his hands he was beheaded by Herod

John, name of 23 Popes

John VIII (872-82) Pope defended the Holy See from the Saracens and from the feudalism of the Italian nobles

John X (914-28) Pope fought the Saracens whom he defeated on the banks of the Garigliano (915)

John XXII (1316-34) Pope elected during the Babylonish Captivity he excommunicated Louis of Bavaria (1324) in his pontificate the papal see was established on Fr. soil

John XXIII (1410-15) Pope deposed at Council of Constance (1418)

John of Austria, Don (1546-78) Span. soldier distinguished himself against the Moors in Granada (1570) and at the battle of Lepanto (1571)

John of Gaunt, Duke of Lancaster (1340-99) 4th son of Edward III married Blanche daughter of Henry Duke of Lancaster vainly attempted to secure the throne of Castile

John, Augustus (born 1870) Eng. painter elected A.R.A. (1921) ultra modern in tendency his distinguished for powerful draughtsmanship sense of design and use of distortion for emphasis and decorative effect painted many portraits of notabilities

John, Sir William Goscombe (born 1860) Brit. sculptor A.R.A. (1909) his works include statue of Sir Arthur Sullivan in St. Paul's Cathedral and Boy at Play in the Tate Gallery

Johnson, Samuel (1709-84) Eng. man of letters 777

Johnston, Sir Harry Hamilton (born 1858) Brit. explorer and administrator explored the Congo and Port W. Africa (1882-83) and Lake Nyasa and Tanganika (1890) founded Brit. Central Africa Protectorate originated plan for Brit. Cape to Cairo route author of many interesting books on Africa and of some novels

Jókai, Maurus (1825-1904) Hungarian novelist took part in the revolution of 1848 works include *Timars Two Worlds* *Lyons Like the Sea* *Black Diamonds* and *The Lion of Janina*

Jones, Henry Arthur (born 1861) Eng. dramatist brought into prominence in 1884 by his melodrama *The Silver King* he wrote *The Jews* *Mrs. Dane's Defence* *The Hypocrites* etc.

Jones, Inigo (1573-1652) Eng. architect after travelling in Italy was appointed architect to the queen also to Prince of Wales introduced the Palladian style into Eng. became surveyor general and designed the banquet hall at Whitehall the west front of old house at House Ashburnham House Westminster etc.

Jones, Paul (1747-92) name assumed by John Paul Scot. naval hero in 1773 emigrated to Virginia entering the Amer. naval service (1775) he made bold descents on the coast of Eng. and Scot. and in 1779 did much damage to the Eng. fleet

Jones, Sir William (1746-94) Brit. Orientalist and linguist in 1783 became judge of the high court of Calcutta founded the Asiatic Society of Bengal a pioneer in Sanskrit learning

Jennons, Ben (1873-1937) Eng. dramatist 1418

Josephine, Marie Rose (1763-1814) Empress of Napoleon I a native of Martinique in 1778 she married the Vicomte de Bernabonne who was guillotined married Bonaparte (1796) and was divorced from him in 1810

Josephus, Flavius (A.D. 37-95) Jewish historian unwillingly joined revolt against Romans defended Jotapata against Vespasian but was taken prisoner was present with the Rom. army at the siege of Jerusalem and returned with Titus to Rome his works comprise *The History of the Jewish War* and *The Antiquities of the Jews*

Joshua, son of Nun commander of the Israelites after the death of Moses led

them into the Holy Land and obtained many victories over the tribes of Canaan **Joshua** (7th cent. B.C.) King of Judah abolished idolatry died in battle of Megiddo against Pharaoh Necho King of Egypt

Joubert, Petrus Jacobus (1834-1900) Boer general commandant general in 1st and 2nd Boer wars repelled Jameson raid

Joule, James Prescott (1818-89) Eng. physicist formulated law of conservation of energy measured mechanical equivalent of heat the practical unit of energy, the joule being named after him

Jowett, Benjamin (1817-93) Eng. scholar theologian and tutor master of Balliol College Oxford from 1870 famous for his influence on his pupils made Plato an English classic

Joyson-Hicks, Sir William, Bart (born 1866) Brit. politician, entered Parl. (1906) Postmaster General and Paymaster (1923) Minister of Health (1923-24), Home Sec. (1924) wrote *The Command of the Air*

Judah, Hebrew patriarch 4th son of Jacob and Leah traditional ancestor of tribe of Judah

Judas Maccabaeus (died 160 B.C.) Jewish priest carried on the struggle begun by his father Mattathias who had driven the Syrian idolaters from Judaea entered Jerusalem in 163 after defeating Lyfias and allied himself with the Romans but was defeated and slain (160)

Julian (Flavius Claudius Julianus), The Apostate (A.D. 331-363) Rom. emperor, nephew of Constantine the Great in 361 he was made Caesar and sent to Gaul where he was elected emperor by his army (361) in 363 he undertook an expedition against the Persians in which he lost his life

Julius II (1443-1513) Pope distinguished as a warrior and patron of the arts succeeded in 1503 after driving Caesar Borgia from the Romagna joined the league of Cambrai against Venice (1508) after the submission of the republic he turned his arms against Fr. (1510) in 1511 the Holy League was formed and the Fr. army driven back over the Alps

Jumard, Jean Arrien Antoine Jules (born 1865) Fr. author and diplomatist ambassador to U.S.A. (1901) his books on Eng. literature and life include *English Wayfaring Life in the Middle Ages* *A Literary History of the English People* and *Piers Plowman*

Justinian I (483-526) Roman Emperor succeeded his uncle Justin I in 527 under Justinian the boundaries of the empire were much extended through the victories of Belisarius and Narses over the Persians, Vandals and Ostrogoths, he is chiefly remembered by his masterly codification of Rom. law

Justin Martyr (100? 165?) Christian apologist became a Christian about 132 his chief works are his *Apology* and *Dialogue with Trypho the Jew*

Juvénal (Decimus Junius Juvénalis) (60?-140) Rom. satirical poet his writings dwell on the social evils of early imperial Rome for which he expresses a burning hatred

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Kakabaus, David (1888?-91) King of the Sandwich Islands

Kahil, or Khaleel (died 642) Saracen general The Sword of Allah at first opposed Mahomet by his capture of Damascus brought Syria under the authority of the caliph

Kamel, Malek el (died 1288) Sultan of Eg. succeeded in 1218 he took Damietta from the Crusaders (1221) afterwards captured Jerusalem and other towns but yielded them to the Emperor Frederick II (1229)

Kames, Henry Home, Lord (1696-1782) Scot. judge and miscellaneous writer appointed a judge of sessions with the title of Lord Kames (1752)

Kanaris, Constantine (1780-1877), Gr. patriot distinguished himself in a naval capacity during the war of independence 1211c Minister (1864-66)

- Kane, Eliza Kent** (1820-57) Amer explorer was surgeon and naturalist to the first Grinnell expedition in search of Franklin (1850-52) and commanded the second Grinnell expedition (1853-55)
- Kant, Immanuel** (1724-1804) Ger philosopher 1787
- Kapp, Wolfgang von** (1868-1922) Ger monarchist in 1920 led a short-lived revolt against the republican gov't of Pres. Ebert
- Karajich, Vuk Stefanovich** (1787-1864) known as the father of modern Serbian literature author of a Serbian grammar and dictionary and published numerous folk songs
- Karamzin, Nizholas Mikhailovich** (1765-1826) Rus historian wrote History of the Russian Empire which dates from the earliest times to 1612
- Károlyi, Count Michael** (born 1875) Hungarian politician became provisional pres of Hungarian repub on overthrow of monarchy
- Karr, Jean Baptiste Alphonse** (1808-90) Fr writer among his novels are *Sous les Tillons* (1842) and *Fort en Thème* (1853)
- Karslake, Sir John Burgess** (1821-81) Brit lawyer Attorney General 1867 and 1874
- Kato, Takeaki, Viscount** (born 1849) Japanese statesman was four times Minister of Foreign Affairs and twice ambassador to Gt Brit
- Kato, Tomomatsu, Baron** (born 1849) Jap statesman and sailor in command of fleet which defeated Ger at Tsing tau (1914) Prime Minister (1922)
- Katsura, Taro, Prince** (1847-1913) Jap statesman prime minister on three occasions was instrumental in effecting Anglo-Jap alliance
- Kaufmann, Angelus** (1741-1807) Swiss painter in 1760 came to Eng and was elected a member of the Royal Academy (1768)
- Kaufmann, Constantine von** (1818-82) Rus general annexed Bokhara (1868) forced the khn of Khiva to become the Tsar's vassal (1873) and deprived the khn of Khokand of all his dominions north of the Syr Darya (1876)
- Kaulbach, Wilhelm von** (1805-74) Ger painter painted The Battle of the Huns for the king of Bavaria
- Kaunitz, Prince Wenzel Anton von** (1711-94) Austrian statesman (chancellor and Foreign Minister of Austria (1763-92) 791
- Kaye, Sir John William** (1814-76) Brit historian chief works are histories of the War in Afghanistan (1841) The Sepoy War (1864) and the Administration of the East India Company (1843)
- Kean, Charles John** (1811-68) Brit actor born at Waterford established his reputation in 1838 when he acted as Hamlet Richard III and Sir Giles Overreach in 1842 he married Miss Ellen Tree a celebrated actress
- Kean, Edmund** (1787-1833) Brit actor 815
- Keane of Glumace, John, 1st Baron** (1751-1844) Brit general gained a brilliant victory at Ghurmez in Afghanistan campaign (1838-39)
- Keary, Anne** (1825-79) Brit novelist wrote *Clelie Dely* (1875) and other novels and miscellaneous works
- Keats, John** (1795-1821) Eng poet son of a livery stable proprietor in Finsbury was educated at a school at Fulham where he formed a lifelong friendship with the master's son Charles Cowden Clarke he was apprenticed to Mr Hammond a surgeon at Edmonton whom he left in 1812 but pursued his studies at Guy's Hospital till 1817 he then determined to follow the bent of his genius Andymon his first long poem appeared in 1818 *Isabella or the Pot of Basil* *Hyperion* *Launa* *The Eve of St Agnes* and the *Odes* were written in the course of the next two years meanwhile an hereditary tendency to consumption had developed itself and in September 1820 he was forced to undertake a journey to Italy he was accompanied by his friend, Joseph Severn, who nursed him tenderly during his last illness at Rome where he died in February 1821
- Keble, John** (1792-1866) Brit divine and poet professor of poetry at Oxford (1831-41) vicar of Hursley (1835-66) took a prominent part in the Oxford Movement and wrote several of the *Tracts for the Times* his *Christian Year* has become a classic
- Keene, Charles Samuel** (1823-91) Eng black and white artist for many years a contributor to *Punch*
- Keightley, Thomas** (1789-1872) Brit author wrote *Jury Mythology* (1828) and numerous educational works
- Keim, Theodor** (1825-78) Ger theologian author of *Jesus of Nazareth and the National Life of Israel* etc
- Keiser, Reinhard** (1873-1939) Ger composer wrote *Curie* (1934) etc
- Keith, George Elphinstone, Viscount** (1746-1813) Brit admiral led naval part of expedition which reduced the Cape of Good Hope (1795) commanded the fleet in the *Trafalgar* campaign (1805)
- Keith, James Francis Edward** (1696-1758) Scot field marshal in the Faux service fought on the Jacobite side at blarney mist greatly distinguished himself in the Seven Years War killed at Hochkirchen
- Kellaway Frederick George** (born 1870) Brit journalist and politician Postmaster General (1921-22)
- Keller, Gottfried** (1819-89) Ger novelist and poet wrote *Der grüne Heinrich* (*Green Henry*) (1844) *Die Leute von Seldwyl* (*Seldwyl Folk*) studies of Swiss provincial life etc
- Keller, Helen** (born 1880) Amer author early became blind deaf and dumb under care of Miss Anne Sullivan and others learned to read write and speak wrote *The Story of My Life* etc
- Kellermann, François Christophe, Duc de Valmy** (1735-1820) marshal of France by his victory over the Duke of Brunswick at Valmy compelled the Russians to retire from Pr
- Kellermann, François Étienne, Duc de Valmy** (1770-1815) son of the preceding by his charge at Muenster turned die it into victory
- Kellgren, Johan Henrik** (1751-95) Swed poet his works include *The New Creation*
- Kelly, Sir Fitzroy** (1796-1880) Brit law yer Attorney General (1838-50) made Chief Baron of the Exchequer (1866)
- Kelly, John** (1750-1809) Brit philologist born at Douglas translated the Bible into Manx wrote *Grammar of the Manx Language*
- Kelly, Michael** (1762-1836) Brit vocalist and composer appeared at Drury Lane in 1787
- Kelvin, William Thomson, 1st Baron** (1824-1907) Brit scientist 421
- Kemble, Charles** (1775-1844) Brit actor, 499
- Kemble, Elizabeth** (1761-1836) Brit actress 500
- Kemble, Fanny (Frances Anne)** (1809-93) Eng actress and author 500
- Kemble, Frances** (1736-1822) Brit actress 500
- Kemble, John Mitchell** (1807-57) Anglo-Saxon scholar son of Charles Kemble the actor wrote *The Saxons in England* (1849)
- Kemble, John Philip** (1757-1823) Brit actor 497
- Kemble, Roger** (1721-1802) father of famous family of actors and actresses 497, 159
- Kemble, Stephen** (1708-1822) Brit actor 500
- Kempfenfelt, Richard** (1720-82) Brit admiral son of a Swed officer gained a brilliant naval victory over the Fr (1781) went down in the *Royal George* the disaster commemorated in Cowper's poem
- Kempis, Thomas à** (1379-1471) Augustinian monk born at Kempen in the diocese of Cologne became a monk in the priory of Mount St Agnes near Zwoll in spite of controversy generally regarded as the author of the immensely popular medieval Christian devotional work *The Imitation of Christ*
- Ken, Thomas** (1637-1711), Eng prelate Bishop of Bath and Wells (1685-91) born at Berkhampstead was one of the seven bishops confined in the Tower for opposing James II (1688)
- Kendal, Margaret** (born 1849) Brit actress born at Cleethorpes distinguished herself in many famous plays including *Diaphanes* (1878) and later in *The Square* *Thiller Mrs Blaylock* etc married W H Kendal (1889)
- Kenealy, Edmund Vaughan Hyde** (1819-90) Ir lawyer and journalist famous as counsel for the Tubborno claimant (1873)
- Kennedy, Benjamin Hall** (1804-89) Brit educationist head master of Shrewsbury (1836-66) regius professor of GA at Cambridge (1867-89)
- Kennedy, James** (1405-65) Scot prelate founded St Salvator's College Univ of St Andrews
- Kenneth I, MacAlpine** (died 880) king of the Scots known as 1st king of Scots conqueror of the Picts
- Kenneth, Whita** (1660-1728) Eng private wrote *Pirotechnical Antiquities* etc became Bishop of Peterborough (1718)
- Kennett, Benjamin** (1718-83) Brit biblical critic born at Farnham published the first part of his *Hebrew Bible* in 1776 and the second in 1780
- Kent, Edward Augustus, Duke of** (1707-1420) Brit prince 4th son of George III married (1818) Victoria Maria Louisa youngest daughter of the Duke of Sax-Coburg their child afterwards became Queen Victoria
- Kent, James** (1700-76) Eng composer born at Winchester was organist of Winchester Cath from 1731 to his death
- Kent, William** (1685-1746) Eng painter and architect famous for having introduced a more natural style of landscape gardening
- Kenyon, Lloyd, Lord** (1773-1802) Scot judge distinguished himself by his defence of Lord George Gordon (1780)
- Kepler, Johann** (1571-1630) Ger astronomer born of poor parents at Weil in Württemberg Kepler's Laws his three laws of planetary motion paved the way for Newton's discovery of the law of gravitation
- Keppel, Augustus, 1st Viscount** (1727-56) Brit admiral went round the world with Anson (1740-44) tried by court martial for his indecisive action with the Fr fleet off Bristol (1758) and acquitted
- Kerensky, Alexander Feodorovich** (born 1841) Rus statesman assumed premiership in 1917 when he became head of the provisional gov't on the fall of the monarchy
- Kerguelen-Tremarec, Yves Joseph de** (1734-97) Ir naval officer in 1772 discovered the territory afterwards named Kerguelen Island in Cook
- Kernahan, Coulson** (born 1848) Eng author his novels include *God and the Ant* and *Scoundrels and Co*
- Kerner, Andreas Justinus** (1786-1862) Ger poet of the Southern School
- Kersant, Gu Pierre** (1742-94) Ir naval officer and political writer took part in the Revolution and was unfortunat
- Key, Thomas Hewitt** (1791-1875) Eng philologist wrote *Language its Origin and Development* (1874)
- Keyes, Sir Roger** (born 1872) Brit sailor in command of the naval raid on Zebruges (1918)
- Khosrau I (Chosroes)** (died AD 579) king of Persia succeeded the throne (591) engaged in a war with Justinian (540) and imposed on the emperor a tribute of fifty years by which the latter became tributary to him (562)
- Khosrau II** (died 628) called Parter (victorious) grandson of the preceding declared king (590) invaded the Eastern Empire (602) subdued Syria (611) Palestine (614) and LG and Asia Minor (616) Heraclius led an army against him (622) and between that year and 628 won back all the conquered provinces
- Kidd, Benjamin** (1838-1916) Eng sociologist best known for his *Social Evolution* which has been extensively translated

Kildare, Gerald Fitzgerald, 8th Earl of (died 1813) was concerned in the reigns of Lambert Simnel and Perkin Warbeck attainted in a parliament at Drogheda and sent as a prisoner to London but pardoned.

Kildare, Gerald Fitzgerald, 8th Earl of (died 1834) appointed Lord Deputy of Ir in 1715 and again in 1724-27 and 1732 later he was imprisoned in the Tower of London where he died.

Kilian, Saint, Bishop of Würzburg a native of Ir in the 7th cent did missionary work among the Thuringians.

Kilnash, the name of a learned Jewish family who lived in Provence during the 12th and 13th cent. the most distinguished member was David (died circa 1240) who wrote commentaries on the Old Testament and a Heb grammar and dictionary.

Kinnison, or Kynaston, Sir Francis (1687-1642) Eng poet wrote *Joceline* and *Sydney* (1641).

King, Edward (1629-1910) Brit prelate principal of London College (1863-73) became canon of Christ Church and professor of pastoral theology (1783) Bishop of Lincoln (1885-1910) a prominent member of the High Church party.

King Henry (1692-1699) Eng prelate consecrated Bishop of Rochester (1642) wrote *Poems* (1637).

King, Peter, Baron (1698-1743) Eng statesman and ecclesiastical writer Lord Chancery (1725-33).

King, William (1630-1729) Ir prelate became Archbishop of Dublin (1703) wrote *De Origine Mali* (1702).

Kingslake, Alexander William (1811-91) Brit historian born at Frinton his work is the *History of the War in the Crimea* (1863-67).

Kingsborough, Edward King Viscount (1740-1817) Ing antiquarian son of George 3rd Earl of Kingston edited *The Antiquities of Mycenae* (1880-88).

Kingsley, Charles (1814-71) Brit divine novelist and poet appointed rector of Eversley Hants (1844) *Regius* professor of modern history at Cambridge (1859-66) Canon of Chester (1868-73) (an an of Westminster (1878-79) his first novel *Alton Locke* (1841) was followed by *Yeast* (1851) *Hyacinth* (1853) *Westward Ho* (1855) *Two Years Ago* (1857) *Hereford the Wink* (1866).

Kingsley, Henry (1830-76) novelist, brother of the preceding, wrote *Marionhoe* (1861).

Kington, William Henry Giles (1814-80) Lux author wrote many tales for boys.

Kipling, Rudyard (born 1864) novelist 189.

Kippis, Andrew (1725-96) Eng Nonconformist divine wrote a *Vindication of the Protestant Dissenting Ministers* (1772-73) and other works.

Kirby, John Joshua (1714-74) Lux artist wrote a *Treatise on Perspective*.

Kirby William (1759-1850) Eng divine and entomologist rector of Harham Suffolk (1798-1840) wrote *British Bees* (1802) an *Introduction to Entomology* (1814-28).

Kirk, Sir John (1847-1922) Brit philan. thropist born at Keworth director of the Ragged School Union movement in London for many years.

Kirk, Sir John (born 1832) accompanied Livingstone's second expedition as naturalist was afterwards consul general at Zanzibar induced the Sultan of Zanzibar to sign a treaty for suppressing the slave trade special commissioner to the Niger coast (1893).

Kirkcaldy of Grange, Sir William (died 1673) Scot soldier joined the Lords of the Congregation (1559) pursued Bothwell to the coast of Norway (1568), fought against Mary at Langside, was captured and put to death.

Kisfaludy, Charles (1772-1844) Hungarian poet wrote *Elmy's Love Legends of the Olden Time in Hungary* etc.

Kim, August (1802-65) Ger sculptor his chief work is the 'Amazon attacked by a Panther' in Berlin.

Kitchener of Khartoum, Horatio Herbert, Earl (1850-1916), Brit general, 841, picture 286.

Kittie, John (1804-58) Brit Biblical scholar son of a Plymouth mason published 'The Pictorial History of Palestine' (1840) a *Cyclopedia of Biblical Literature* (1845) etc.

Klaproth, Martin Heinrich (1743-1817) Ger scientist made many important discoveries including those of uranium, vanadium, titanium and mellic acid.

Klein, Bernhard (1794-1832) Ger composer his chief works are the oratorios of *Job* *Jephthah* and *David*.

Klopsch, Friedrich Gottlieb (1724-1803) Ger poet paid a visit to Switzerland (1750) and while there was invited by Baron Bernstorff to Copenhagen where he remained till 1771 when he went to Hamburg as Danish legate besides his famous epic *The Messiah* which occupied him from 1747 to 1778 he wrote a large number of hymns, odes, tragedies and dramas.

Kneller, Sir Godfrey (circa 1648-1723) Ger painter born at Lubeck settled in Eng in 1674 among his chief works are *The Kit Cat Club* a series of forty three portraits and the *Beauties of Hampton Court*.

Knight, Charles (1790-1843) Eng publisher started *The Penny Magazine* (1832-41) and other works intended to promote a taste for literature among the masses.

Knight John Prescott (1803-81) Brit portrait painter sec to the Royal Academy (1848-73).

Knight, Richard Payne (1748-1824) Brit writer on classical antiquity bequeathed his collection of antique bronzes medals and paintings to the British Museum.

Knoblock, Edward (born 1874) Brit dramatist born in N.Y. his plays include *The Shulamite* *Kurriel* and *Milestones*.

Knollys, Sir Francis (1514?-96) Eng statesman on the accession of Elizabeth was appointed vice chamberlain and afterwards treasurer.

Knowles, James Sheridan (1784-1862) Brit dramatist wrote *Virginia* (1810) *The Hunchback* (1852) and other dramas.

Knowles, Sir James Thomas (1881-1906) Brit architect and man of letters, edited the *Contemporary Review* (1870-77) founder of the *Nineteenth Century and After* (1877).

Knox, John (1505-72) Scot reformer ordained priest before 1530 embraced the reformed doctrine about 1542 in consequence of the persecution to which he was subjected took refuge in the castle of St Andrews (1547) was a prisoner in Ir (1547-49) came to Eng (1549) where he exercised much influence on the course of the Reformation during the reign of Mary resided chiefly in Swit returned to Scot (1569) and so inflamed the people by his sermons against the Rom Church that riots took place throughout the religious struggle which ensued Knox was the leading spirit of the extreme Protestant party and the bitter opponent of the queen.

Koch, Joseph Anton (1748-1839) Ger painter excelled in landscape.

Koch, Karl Hermann Emanuel (1809-79) Ger naturalist and scientific explorer published *A Journey Across Russia to the Isthmus of the Caucasus* (1842-3) *Wanderings in the East* describing his travels in Turkey and Armenia (1846-7) and *Dendrology* (1876).

Koch, Robert (1843-1910) Ger bacteriologist 1333.

Kock, Charles Paul de (1794-1871) Fr novelist, wrote *Le Barber de Paris* (1826) *Moustache* (1838) etc.

Kolchak, Vladimir (1875-1920) Rus admiral after World War led campaign against the Bolsheviks was executed by order of Irkutsk revolutionary commission.

Kollar, Jan (1793-1832) Hungarian poet an ardent advocate of Pan-Slavism.

Koltsch, Alois Vasodvitz (1808-42), Rus writer of lyric poems, known as the "Russian Burns".

Koenig, Friedrich (1774-1833), Ger inventor of the steam printing press, came to England in 1806 invention first adopted

in 1810 when a sheet of the *Annual Register* was produced on his machine.

Korotkov, Leonida Georgievna (1870-1918) Rus general commanded operations in Gallia in World War (1914-18) killed in action against Russian Red Army.

Kosciusko, Tadeusz (1746-1817) Polish patriot went to Amer and became aide de camp to Washington major general in the Polish army (1798) distinguished himself in the campaign of 1792 especially at the battle of Dubienka after the submission of Stanislaus retired to Leipzig on the outbreak of the second Polish rising (1794) was chosen commander in chief succeeded in expelling the Rus from Poland but was finally overwhelmed at Maciejowice imprisoned in a fortress near St Petersburg but released on the accession of the Emperor Paul settled in Fr (1798) and died in Switzerland.

Kossuth, Louis (1802-94) Hungarian patriot was returned to the Diet as deputy for Pesth (1847) became leader of the party of reform held the office of minister of finance in the new Hungarian ministry and after its fall was made pres of the Committee of National Defence in 1849 the Hungarians declared themselves independent and Kossuth carried on the government from Debreczin and afterwards from Szegedin but finding it impossible to act in conjunction with Gorgei he resigned (1849) the ill success of his countrymen in the field compelled him soon afterwards to flee to Turkey whence he removed to Eng, and afterwards to It.

Kotzebue, August Friedrich von (1761-1819) Ger playwright whose works were popular throughout Europe *The Stranger* is one of his best.

Kresler, Fritz (born 1875) Austrian violinist regarded as the most famous of his time.

Kropotkin, Peter, Prince (1842-1921) Rus anarchist and geographer for long exiled on account of his advocacy of peaceful anarchy.

Krüdener, Barbara Juliana, Baroness de (1766-1824) Rus visionary visited Paris (1805) where she proclaimed the approach of the millennium predicted the fall of Napoleon etc finally went to the Crimea and founded an institution for the reformation of criminals.

Kruger, Stephen John Paul (1826-1904) Boer statesman chosen pres of the Transvaal (1883-1888-1893-1898) held this office during the South African War with Eng until October 1900 when he escaped to Holland 30, 35.

Krupp, Alfred (1812-87) Ger metal founder inventor of the guns which bear his name son of Friedrich Krupp (1787-1826) whose business he expanded until it became one of the greatest armament firms in the world 177.

Krupp Friedrich (1787-1826) Ger iron master founder of the house of Krupp and great Krupp works at Essen 177.

Krupp Friedrich Alfred (1854-1902) son of Alfred and grandson of Friedrich founded on the Krupp business to his daughter Bertha 1890, 1893.

Krupp, von Bohlen und Haebach, Bertha (born 1836) eldest daughter of Friedrich Alfred inherited the great Krupp works 1882.

Kubelick, Jan (born 1880) Bohemian violinist born at Mielitz made his debut in Vienna (1898) and afterwards travelled extensively giving concerts throughout Europe and Amer.

Kublaik Khan (died 1294) first Mongol emperor of China became Genghis Khan of the Mongols in 1259 he expelled the Kim dynasty from N China in 1260 and completed his conquest of the country by the overthrow of the Sung dynasty in S China (1279).

Kugler, Franz Theodor (1808-58) Ger writer on the fine arts his chief work is a *Manual of the History of Painting*.

Kulmann, Richard von (born 1878), Ger diplomatist he was responsible for the treaties with Rus and Rumania during World War (1914-18).

Kun Bela (born 1886), Hungarian com

munist established Soviet republic in Hungary after World War (1918)

Kunckel, Johann (1630-1703) Ger chemist made important discoveries, including that of the phosphorus which bears his name

Kutuzov, Michael, Prince of Smolensk (1745-1813), Russ field marshal in 1812 was given the chief command against Napo con and gained a brilliant victory at Smolensk

Kyrie, John (1664-1724) Eng philan thropist called the Man of Ross

Lachouabere, Henry (1831-1812) Brit writer and politician M P for Northampton (1850-1906) started *Truth* (1877)

Leontius, Lucius Calpurnius Firmianus (250?-340?) Christian writer born in Africa was converted to Christianity about 300 taught rhetoric and had among his pupils Crispus son of the Emperor Constantine

Ladislau, Sami (1040-95), King of Hungary established Christianity and founded national greatness

Laelius, Cnaeus (235?-165? BC) Rom general defeated Syphax King of the Massagethians (203) consul (190)

Laelius, Cnaeus, called *Sapienter* (185?-115 BC) accompanied Scipio Africanus to the siege of Carthage was consul in 140

Laennec, René Thémophile Hyacinthe (1781-1826) Fr physician invented the stethoscope

Lafayette, Marie Joseph Paul Gilbert du Motier, Marquis de (1757-1834) Fr general took part in the Amer War of Independence and was entrusted by Washington with the defence of Virginia was one of the earliest leaders in the Ir Revolution held office under the Bourbons and took part in raising Louis Philippe to the throne (1830)

La Fontaine, Jean de (1621-96) Fr poet and fabulist famous for his *Fables*—old tales rewritten with delightful freshness and purity of style

Lagerlof, Selma (born 1858) Swedish authoress awarded the Nobel prize for literature (1909) for her novels and stories depicting simple life and character (Gosta Berling's saga, In viable Link, The Girl from the Marsh)

Lagrange, Joseph Louis (1736-1813) Fr mathematician co-operated in verification of Newtonian theory and developed new branches of pure mathematics

Laing, David (1790-1878) Scot antiquarian wrote the *Life and Works of John Knox* (1848-64)

Laines, Jago (1512-65) Sp Jesuit born in Castile was one of the earliest disciples of Loyola and succeeded him as general of the Jesuits (1558)

Lally, Thomas Arthur, Baron de Tollyndal, Comte de (1702-66) Fr general son of an Ir Jacobite appointed commander in chief of the Fr possessions in India (1758) taken prisoner by Sir L. Coote at Pondicherry (1761) was finally executed in Fr portrait 800

Lamarck, Jean de (1744-1829) Ir naturalist anticipated Darwin's origin of species theory except natural selection, believed in spontaneous origin and variation of species

Lamarque, Alphonse de (1790-1869) Fr poet, historian and statesman his poems and stories heralded romantic revival unsuccessfully contested presidency (1851)

Lamb, Lady Caroline (1766-1828) wife of the Hon William Lamb, afterwards Lord Melbourne, wrote "Glenarvon and other novels"

Lamb, Charles (1775-1834), Eng essayist and poet, 1115

Lamb, Mary (1764-1847), sister of Charles Lamb in conjunction with whom she wrote "Tales from Shakespeare," 1115

Lambert, John (1619-94), Eng general fought at Marston Moor and Naseby led the van at Dunbar after the death of Cromwell restored the Long Parliament against Monk by whom he was defeated, exiled to Guernsey

Lancaster, Sir James (died 1618) Eng

navigator conducted the first trading expedition of the East India Company (1600)

Lancaster, John of Gaunt, Duke of (1340-90) Eng prince See John of Gaunt

Lancaster, Joseph (1771-1838), Eng Quaker founder of the Lancasterian or monitorial system of education

Lander, Richard (1804-34) and John (1807-39) Brit explorers of Africa natives of Cornwall in 1828-31 the brothers explored the lower course of the Niger and published their *Journal* in 1832

Lander, Walter Savage (1775-1864) Brit author wrote *Gehir* (1798) *Si monidea* (1806) *Count Julian* (1811) and *Imaginary Conversations* (1824-29)

Landsaer, Sir Edwin Henry (1802-73) Brit artist 633

Landsaer, John (1769-1852), Eng engraver and writer on art

Landsrae (1005-89) Eng prelate and scholar born at Pavia was made Archbishop of Canterbury (1070)

Lang, Alexander Matheson (born 1879) Eng actor born Canada successfully created name parts in *Mr W and The Wandering Jew*

Lang, Andrew (1844-1912) Scot scholar poet and miscellaneous writer amongst his numerous works were several notable books on mythology including *Custom and Myth* (1884) *Magic and Religion* (1901) etc

Langham, Simon de (1310-76) Eng prelate Chancellor (1364) and Archbishop of Canterbury (1366) opposed Wycliffe

Langland, William (1330?-1400?) Eng poet supposed author of *The Vision of William concerning Piers the Plowman*

Langley, Samuel Pierpont (1834-1906) Amer astronomer and physicist in vintor of first heavier-than-air flying machine 340 341, 342

Langlois, Peter de, Eng monk of the 14th century wrote in Ir verse a *Chronicle of England* translated by Robert de Brunne

Lankester, Sir Edwin Ray (born 1847) Brit zoologist author of *Loaches of the Old Red Sandstone* *Diversions of a Naturalist* (1911) *Half hours with the Microscope* (1918) and other works

Lansbury, George (born 1859) Brit socialist politician and journalist entered Parl 1910 as member for Bow and Bromley, edited *The Daily Herald* for some years, founded *Lansbury's Weekly*

Lansdowne, Henry Charles Keith Petty Fitzmaurice, 5th Marquis of (born 1844) Brit statesman Gov Gen of Canada (1883-88) Viceroy of India (1884-85) Sec for War (1895-1900) Foreign Sec (1900-05) minister without portfolio (1915-16)

Lansing, Robert (born 1864) Amer lawyer authority on international law Sec of state in Pres Wilson's cabinet during World War

Laplace, Pierre Simon, Marquis de (1749-1827) French mathematician and astronomer called the French Newton on account of his nebular hypothesis and other discoveries

Lape, Arnolfo di (1212-1300) It architect and sculptor built the Cathedral of Florence

La Rochefoucauld, François Duca de (1613-80), Fr author famous for his moral maxims

La Salle, Robert Cavalier de (1643-87) Ir traveller traced the Mississippi to its source (1682)

Las Casas, Bartolomeu de (1475-1566) Sp missionary to W India called the Apostle of the Indians for his efforts to better their lot

Las Cases, Emmanuel Desdunndé, Comte de (1766-1842), Fr historian one of Napoleon's officers lived with him for some time at St Helena wrote *Mc morial de Sainte Helène* (1821-28)

Lassalle, Henry George Charles, Viscount (born 1882), eldest son of Earl of Harewood, awarded DSO and Croix de Guerre during World War married Princess Mary only daughter of King George V and Queen Mary (1922)

Lassalle, Ferdinand (1825-64) Ger socialist founder of the social democratic movement

Latimer, John (1740-1837) Brit ornithologist wrote a *General History of Birds* (1821-24)

Latimer, Robert Gordon (1812-58) Brit philologist and ethnologist wrote *The English Language* (1841) etc

Latimer, Hugh (circa 1490-1555) Eng reformer son of a yeoman of Thurstaston in Leicester-shire Bishop of Worcester (1535) but resigned in consequence of the Act of Six Articles (1539) was imprisoned for six years in the Tower in 1553 was confined again in the Tower with Ridley and Crammer afterward was burnt together with Ridley at Oxford

Laure, William (173-1645) Eng J late became Bishop of Bath and Wells (1626) of London (1628) and Archbishop of Canterbury (1633) having rendered himself obnoxious to the Puritans was impeached of high treason and after imprisonment (1641-42) was beheaded on Tower Hill

Laure, Sir Harry Maclean (born 1870) Scot comedian born at Fortobello made his first London appearance in 1900 remarkable in Scot comedy and character

Lauderdale, John Marjland Duke of (1616-82) Scot statesman supported Prince Charles and was killed at Worcester after the Restoration and ministered the affairs of Scot and treated the Covenanters with great cruelty

Laurier, Sir Wilfrid (1841-1919) Canadian statesman Prime Minister of Canada (1896-1911)

La Valette, Jean Pariset de (1494-1564) became grand master of the knights of St John of Jerusalem (1557) successfully defended Malta against Soliman II (1565)

Lavery, Sir John (born 1836) Brit painter achieved distinction with pictures of classical subjects painted in modern manner and with portraits

Lavoisier, Antoine Laurent (1743-94) Ir chemist published a new theory of chemistry the anti-phlogistic (1773-75) on which the modern science is based was condemned as an infidel and guillotined

Law, Andrew Bonar (1858-1923) Brit statesman born in New Brunswick, Canada entered the House of Commons in 1900 was Prime Minister (1922-23)

Law, John (of Lauriston) (1671-1729) Scot financier formed the Mississippi Company (1717) to which he granted the sole right of trading with Louisiana (China and other countries) controller general of Fr finance (1720) company bank soon afterwards failed and the Royal Bank of France declined to pay

Law, William (1661-1711) Eng mystic and conjuror educated at Cambridge besides *The Serious Call* (1729) he wrote several other works

Laws, Henry (1600-62) Eng musical composer set to music the odes of Milton and the poems of Waller Herrick and others

Lawrence, David Herbert (Eng poet and novelist exponent of modern pseudo-scientific school of fiction (*The White Peacock* *The Lost Girl* *Women in Love*)

Lawrence, Sir Henry Montgomery (1804-57) Brit soldier and administrator when the India Mutiny broke out was chief commissioner at Oude and though he was defeated by the rebels at Chinhli did much to save India by his efforts for the defence of Lucknow

Lawrence, John Laird Mair, 1st Baron (1811-79) Brit administrator Gov Gen of India (1864-69) gained such influence over the Sikhs by his good government of the Punjab and personal character that on the outbreak of the Mutiny, they remained loyal it was mainly owing to reinforcements of Punjabis that Delhi fell and India was saved

Lawrence, Sir Thomas (1769-1830), Brit portrait painter 1423

Lawrence, Sir William (1783-1867), Brit surgeon surgeon to St Bartholomew's

LAWSON

Hospital (1828-65) senior sergeant surgeon to Queen Victoria
Lawson, Cecil (1871-82) Brit landscape painter son of William Lawson portrait painter remained obscure till A Minister's Garden and A Pastoral appeared at the Grosvenor Gallery in 1878
Lawson, Sir Wilfrid (1828-1906) Brit politician and temperance reformer born at Carlisle entered the House of Commons in 1859 and with brief intervals was in Parliament till his death he did much to promote temperance
Layard, Sir Austen Henry (1817-94) Eng archaeologist diplomat and writer 571
Leacock, Stephen Butler (born 1849) Canadian educationist and author professor of political economy at McGill Univ famous for his newspaper sketches (Interpretation of the Moon from the Library of the University of Toronto) also wrote The Uncivilized World of Social Justice
Leake, Sir John (1808-72) Eng admiral fought at La Rochelle (1847) relieved Gibraltar (1870) reduced Barcelona and Majorca (1870)
Leah, Edward (1811-88) Eng author and artist made American popular wrote The Book of Nonsense (1846)
Leahy, Pierre and Paul, pioneers in air ship construction 331
Lecky, William Edward Hartpole (1838-1903) Brit historian his best known work is his History of England in the Eighteenth Century (1858-90)
Lee, Anne (1768-84) daughter of a Manchester blacksmith went to America and there founded the sect of Shakers
Lee Robert Edward (1807-70) Amer gen after the outbreak of Civil War was placed in command of the army of Northern Virginia (1862) gained several victories over the North but was defeated at Gettysburg (1863) became general in chief of the Confederate army (1865) surrounded at Appomattox (1865)
Lee, Sir Sidney (born 1859) Eng man of letters leading authority on Shakespeare editor of Dictionary of National Biography (1891) Life of Shakespeare (1891) Life of Queen Victoria (1891) Life of King Edward VII
Lee of Fareham, 1st Viscount (born 1868) Brit politician 1st Lord of Admiralty (1921) presented his country with bequests to the nation for the use of the Prime Minister
Leesh, John (1817-64) Brit artist son of a cotton house keeper educated at the Charterhouse best known by his political cartoons in Punch and elsewhere in the Comic History of England and Comic History of Rome and Hood's Comic Annual
Leeds, Thomas Osborne, Duke of (1629-1712) Eng politician best known as 1st Duke minister of Charles II played an important part in the revolution of 1688
Le Gallienne, Richard (born 1866) Brit author and poet a native of Liverpool his works include English Poems (1892) The Quest of the Golden Girl (1896) etc
Legends, Adrien Marie (1752-1837) Fr mathematician born at Toulouse his most important contribution to mathematical science was that on elliptic functions
Legge, George, Baron Dartmouth (1648-91) Eng admiral failed to prevent the landing of William of Orange took part in a Jacobite conspiracy (1690) and died a prisoner in the Tower
Legros, Alphonse (1837-1911) Fr painter and etcher of humble parentage came to Eng in 1863, among his best works are Death and the Woodman (an etching)
Leibniz, Gottfried Wilhelm (1646-1716) Ger mathematician and philosopher invented the differential and integral calculus
Leicester, Robert Dudley, Earl of (1532?-86) Eng courtier narrowly escaped execution in 1585 for his support of Lady Jane Grey rose rapidly in Elizabeth's favour and is suspected of having murdered his

wife Amy Robsart (1580) in the hope of winning the queen's hand
Leighton, Alexander (1568-1649), Scot divine and physician went to London (1618) wrote Zion's Plea (1628) for which he was summoned before the Star Chamber and imprisoned in the Tower till 1640
Leighton, Frederick, Baron (1880-96) Brit painter and sculptor among his principal works are 'The Triumph of Music' (1856) 'Hercules Wrestling with Death' (1871) 'The Daphnephoria' (1876) etc he became Pres of the Royal Academy (1878)
Le Kew, John (1784-1846) Eng architectural engraver illustrated the works of Britton Pugin and Neale
Leland, John (c. 1500-62) Eng antiquary and linguist became chaplain librarian and antiquary to Henry VIII who commissioned him to search for antiquities and examine the libraries of all the abbies and colleges in the kingdom most of his MSS were afterwards placed in the Bodleian Library
Lely, Sir Peter (1617-80) Eng court painter born Germany of Dutch family came to Eng in 1641 and succeeded Van Dyke as painter to the king his best known portraits are those of the ladies of the court of Charles II
Lemon, Mark (1808-70) Brit journalist joined in starting Punch (1841) of which he was editor (1844-70) he wrote many farce melodramas novels songs and essays
Lemprière, Jean (1768-1824) Brit scholar chiefly famous for his Classical Dictionary
Lennin, Nikolai (1870-1924) assumed name of Vladimir Ilyich Ulanoff Rus Bolshevik leader with Trotsky overthrew Kerensky and established dictatorship
Leno, Dan (1860-1904) Eng comedian began his music hall career as a clog dancer but ultimately became the foremost comedian of his day for many years appeared regularly at the Drury Lane pantomimes
Lenulus, Publius Cornelius Sura (died 63 B.C.) Rom politician consul (72 B.C.) joined Catiline's conspiracy was arrested and put to death in prison
Leo I, the Great (c. 390-461) Pope succeeded Sylvester III in 440 secured the condemnation of the Nestorian heresy at the General Council of Chalcedon (451) induced Attila to spare Rome (452) but it was pillaged by Goths (455)
Leo IX (Bruno) (1002-54) Pope elected at the Diet of Worms (1048) and confirmed by the Rom clergy attacked the Normans and was taken prisoner at Civitella (1053) but released after ten months imprisonment
Leo X (Cardinal Giovanni de Medici) (1475-1521) Pope son of Lorenzo the Magnificent born at Florence became Pope in 1513 in 1515 he signed the famous concordat with Francis I his pontificate is one of the most brilliant periods in the history of art and literature and is also memorable as the time when the Reformation began
Leo XII (Annibale della Genga) (1760-1829) Pope a native of Romagna succeeded Pius VII in 1823
Leo XIII (Giovanni Pecci) (1810-1903) Pope born at Carpineto in the Papal States elected Pope (1878) among his most important encyclicals are those concerning the Fr Nationalist movement (1888) and the Labour question (1891)
Leo III (died 741) Emperor of the East called the Isaurian succeeded Anastasius II in 717 in 718 the Saracens besieged Constantinople but were at last defeated by condemning the worship of images, he started the celebrated Iconoclast controversy
Leon, Juan Ponce de (1460-1521), Sp adventurer accompanied Columbus in 1493 conquered Porto Rico discovered Florida in 1512 died in Cuba
Leonsavalle, Ruggero (1808-1910) It composer after years of struggle kept into fame with his opera I Pagliacci
Leonidas, King of Sparta defended the pass of Thermopylae against Xerxes king of Persia but owing to treachery was surprised and slain (480 B.C.)

LEYBOURNE

Leopold I (1157-94) Duke of Austria after taking part in the Third Crusade seized Richard I, and sold him to the Emperor Henry VI
Leopold II (1835-1909) Duke of Austria son of the Emperor Albert I defeated by the Swiss at Morgarten (1315)
Leopold III (1851-80) Duke of Austria son of Albert II slain at Bempach
Leopold I (1840-1909) Ger king and Holy Rom emperor King of Hungary (1865) of Bohemia (1867) elected emperor (1871) his attempts to secure the throne of Sp for his son Charles led to the war of the Sp Succession
Leopold II (1747-92) Ger king and Holy Rom emperor, succeeded to throne of Austria (1790), elected emperor (1790)
Leopold I (1790-1865) King of the Belgians elected king by the National Congress (1831) applied himself to the development of the resources of the country
Leopold II (1835-1909) King of the Belgians succeeded his father (1865) founder of the Congo Free State after wards the Belgian Congo
Leopoldus, Marcus Aemilius (died 13 B.C.) Rom general attached himself to Caesar with whom he was consul in 46 B.C. after Caesar's assassination joined Antony and Octavian the three forming the first triumvirate
Lermontoff, Mikhail Yurevitch (1814-41) Rus poet wrote The Novice The Demon The Song of the Czar, Ivan Vasilievitch etc
Le Sage, Alain René (1668-1747) Fr novelist and dramatist born at Bayeux in Brittany produced Le Diable Boiteux (1707) Gil Blas (1715-35)
Leschetzky, Theodor (1831-1915) Polish pianist and composer 330
Leslie, Alexander, Earl of Leven (1790-1861) Scot soldier became commander in chief of the Covenanters (1839) and defeated the royal forces at Newburn (1840), commanded the Scots in the Parliamentary army at Marston Moor
Leslie, Sir John (1766-1852) Scot mathematician by means of the differential thermometer which he claimed to have invented he carried out original investigations in photometry hydroscopy and the temperature of space
Lesseps, Ferdinand, Viscount de (1805-94) Fr engineer 767
Lessing, Gotthold Ephraim (1728-81) Ger dramatist and critic his Laokoon treatise on the arts profoundly influenced romantic movement in Ger (Miss Sara Sampson The Young Scholar)
L'Estrange, Sir Roger (1616-70) Eng author fought for Charles I was licenser of the press under Charles II and started the London Gazette (1663-65), and the Observer (1678-87)
Le Sueur, Jean François (1760-1837) Fr musical composer composed *L'émigré* *La Caverne* *Les Barbares* and other operas
Leunigen, Gk philosopher disciple of Zeno and teacher of Democritus originated the atomic theory
Leuwenhoek, Anthony van (1632-1723) Dutch microscopist made important discoveries in anatomy
Lever, Charles (1806-72) Ir novelist born in Dublin among his works are Harry Lorrequer (1837) Charles O'Malley (1841) and Con Cregan (1849)
Leverhulme, William Hesketh Lever, 1st Viscount (1851-1925) 353
Leverrier, Urbain Jean Joseph (1811-77) Fr astronomer born at St Lô in Normandy in 1846 discovered the planet Neptune
Lewis, George Henry (1817-78) Eng critic and writer published a History of Philosophy (1845-46) Life of Robespierre (1849) Life of Goethe (1855) Problems of Life and Mind (1874-79) etc, 1066, 1067, 1068
Lewis, John Frederick (1806-76), Eng artist excelled in representations of Eastern life and scenery
Lewis, Matthew Gregory (1775-1818), Eng author wrote The Monk (1795) The Bravo of Venice (1804), and other novels also several plays
Leybourne, Sir William (died 1709) first Eng admiral known by the title of Admiral of the Sea of the King of England

LEYDEN

Leyden, John (1775-1811) Scot poet and orientalist contributed to Scott's *Minstrelsy of the Scottish Border* (1787-1793). Dutch painter and engraver of the Flemish school.

L'Hôpital, Michel de (1606-73) Fr statesman prevented the establishment of the Inquisition in Fr secured the passing of an edict granting freedom of worship to the Protestants his pacific policy being distasteful to the Guises civil war broke out (1562), and he was deprived of his office (1568).

Lhuyd, Edward (1670-1706) Welsh antiquary wrote *Archæologia Britannica* etc.

Liberius (314-393) Gk rhetorician taught at Constantinople Athens and Antioch. Saints Basil and Chrysostom were among his pupils.

Liberius (died 366) Pope succeeded Julius I (352) banished by Constantine (356) retracted (358) and allowed to return.

Liebowitz, Karl Max von, Prince (born 1860) Ger ambassador to St Britain his memorandum showing Germany's responsibility for World War was made public without his sanction.

Liddell, Henry George (1811-98) headmaster of Westminster School (1846-55) dean of Christ Church Oxford (1855-91) joint author of Liddell and Scott's Greek Lexicon.

Lie, Jonas (1833-1908) Norwegian novelist wrote *The Man with the Second Sight* (1870) *The Pilot and His Wife* (1874) *The Fairy Children* (1908) etc.

Liebig, Justus, Baron von (1803-73) Ger chemist discovered chloroform chloral etc. among his chief works is *Organic Chemistry in its Application to Agriculture* (1840).

Lieschke, Wilhelm (1826-1900) Ger socialist and journalist spent 1½ years in Eng and joined the International (1864) became editor of the *Demokratisches Wochenblatt* (1867) imprisoned on several occasions elected to Reichstag (1874) became editor of *Vorwärts* (1890).

Lighthfoot, Joseph Barber (1828-89) Eng prelate bishop of Durham (1879) published commentaries on St Paul's epistles and the Apostolic Fathers etc.

Liguori, St Alfonso Maria dei (1696-1787) founded the Congregation of the Most Holy Redeemer for promoting the religious education of the poor (1732).

Li Hung Chang (1823-1901) Chinese statesman introduced many Western ideas into China.

Lilienthal, Otto, Ger pioneer of flying 339, 340.

Lillo, George (1693-1739) Eng dramatist wrote *George Barnwell* *Fatal Curiosity* and *Arden of Feversham*.

Lilly, William (1602-81) Eng astrologer was consulted by both parties during the Civil war.

Lily, William (1466-1528) Eng educationist first master of St Paul's school, his Latin Grammar was published in 1513.

Linsens, Thomas (circa 1460-1524) Eng physician founder and first pres of the College of Physicians.

Linsolin, Abraham (1804-65) Amer pres, 448.

Lind, Jenny (1820-87) Swedish vocalist 1153.

Lindsay, Sir David (circa 1490-1555) Scot poet he wrote *The Dreme* *The Complaynt* A Satyre of the Three Estates etc.

Lingard, John (1771-1851) Eng historian his works are *Antiquities of the Anglo-Saxon Church* (1806) and *A History of England* (1819-30).

Linsley, Thomas (1732-95) Eng composer became proprietor of Drury Lane Theatre in conjunction with his son in law R B Sheridan (1776) wrote the accompaniment to the aria in the *Barber's Opera* etc.

Linnæus (Von Linné), Carl (1707-78) 891.

Linnell, John (1792-1882) Eng artist painted portraits of Blake Mulready Peel, Carlyle and other famous men also many landscapes.

Linton, Eliza Lynn (1822-98), Eng novelist,

wrote *The True History of Joshua Davidson* (1872) etc.

Linton, William James (1812-98) Eng wood engraver published a *History of Wood Engraving* and made many fine wood engravings to illustrate Tennyson's poems and art publications.

Lippi, Fra Filippo (1412-69) Florentine painter among his masterpieces are the frescoes in the cathedral of Spoleto and Prato and a Coronation of the Virgin now at Florence.

Lipton, Sir Thomas (born 1850) Eng merchant developed small grocery business into huge organization of Lipton's Ltd several times challenger for America's Cup a yachting trophy.

Lisle, Lady Alison (died 168) widow of John Viscount Lisle condemned to death by Jeffreys on the charge of having sheltered some of Monmouth's adherents after his defeat.

Lisle, Joseph Rouget de (1760-1836) Fr revolutionist author and composer of the *Marseillaise*.

Lister, Joseph, Baron (1827-1912) Jug surgeon 321.

List, Franz (1811-86) Hungarian pianist and composer 397, picture 149.

Liverpool, Robert Banks Jenkinson, 2nd Earl of (1770-1828) Brit statesman became Foreign Sec (1801) Home Sec (1804-9) Sec for War and the colonies (1809-12) Prime Minister (1812-27).

Livingstone, David (1813-73) Scot explorer 251, 653, 684, 685, picture 658.

Livy (59 B.C.-17) Rom historian wrote a *History of Rome* from its foundation to 4 B.C.

Llewelyn ap Gruffydd (1224-82) last of the native princes of Wales on refusing to do homage to Edward I was driven to the fastnesses of Snowdon where he took up arms (1282) and was slain in battle.

Lloyd George, David (born 1863) Brit statesman 701.

Lobai, Mathieu (1538-1616) Fr physician settled in Eng and became physician to James I his Sirpium Advancement was the first attempt to classify plants according to their natural orders the Lobelia was named after him.

Lo Bengula (1833-94) King of the Matabile 30, 32, 34.

Loeb, Jerome (1592-1678) Port Jesuit missionary after labouring for nine years in Abyssinia was expelled (1634) his *History of Ethiopia* was translated by Dr Johnson.

Lock, Matthew (1633-77) Eng musician composed music for *The Tempest* and *Woburn*, his book *Micrologia* contained the first rules in thoroughbass ever published in Eng.

Locke, John (1632-1704) Eng philosopher his most important works are an Essay concerning Human Understanding (1690) a Treatise on Education (1693) three Letters on Toleration (1690-92) a Treatise on Civil Government and a Vindication of the Reasonableness of Christianity (1695).

Locke, Joseph (1801-60) Eng civil engineer assisted George Stephenson in constructing the Manchester and Liverpool Railway (1826-30) afterwards completed the Grand Junction Railway (1837).

Locker-Lampson, Frederick (1821-96) Brit politician published *London Lyrics* (1837) *London Rhymes* (1882) etc.

Lockhart, John Gibson (1794-1854) Scot author married Sir Walter Scott's daughter Sophia (1820) edited the *Quarterly Review* (1826-29) wrote a *Life of Burns* (1828) *Life of Scott* (1837-38) and other works.

Lodge, Sir Oliver Joseph (born 1851) Brit scientist professor of physics at University College Liverpool (1880-1900) principal of the University of Birmingham (1900-20) has made many important researches in connexion with wireless telegraphy and the qualities of the atom pres of the Society for Psychical Research (1901-4) has written *Modern View of Electricity* (1889) *Life and Matter* (1901) *Man and the Universe* (1908).

Lodge, Thomas (circa 1558-162) Eng poet and miscellaneous writer from his

LOUIS

"*Rosalynde*" (1590) Shakespeare derived the plot of *A You Like It* from.

Logan, John (1748-88) Scot divine and poet *The Cuckoo* is his best known 311.

Lombroso, Cesare (1836-1909) It criminologist originated theory that there is a recognizable criminal type (The Criminal The Man of Genius).

Lomonosov, Michael (1711-65) Rus poet and historian wrote a *History of Russia* and many odes and lyrics.

London, Jack (1878-1916) Amer novelist born in San Francisco his numerous novels of outdoor life and adventure include *A Daughter of the Snows* (1902) *White Fang* (1907) *The Valley of the Moon* (1914) etc.

Long, George (1800-79) Eng classical scholar wrote *The Decline of the Roman Republic* (1864-69).

Long, Walter, 1st Viscount (1834-1924) Brit statesman Colonial Sec (1916-19) First Lord of Admiralty (1919-21) championed landed and agricultural interests.

Longfellow, Henry Wadsworth (1807-82) Amer poet his chief volumes of poetry were *Voices of the Night* (1831) *The Spanish Student* (1843) *The Atlantic* (1847) *The Golden Legend* (1849) *The Song of Hugh the Pilgrim* (1849) *The Courtship of Miles Standish* (1858) and *Tales of a Wayside Inn* (1863) 22.

Loraine, Robert (born 1876) Eng actor and writer served in Royal Air Force during World War achieved great success as Cyrano de Bergerac in Rosland's famous play.

Lothar I (738-85) King of Ger and Holy Rom emperor succeeded his father Louis I the German (840) deposed by his brother Louis and Charles I on pretext (841) and compelled to retire to a division of the Empire.

Lothar II (1060-1137) King of Ger and Holy Rom emperor Emperor of the West (1074-1137) his 12th son and of Transylvania and Frederick of Hohenstaufen took up arms to elect the emperor was crowned by his supporters at Aachen (1133) his name is famous.

Lott, Pierre (1840-1933) French novelist his stories in impressions of social, place and people drawn by their exquisite style.

Loubet, Émile (born 1838), Fr statesman pres of 121 public (1899-1906).

Louis (Ludwig) (894-911) called the Child son of the Emperor Arnulf became king of the East Franks in 900 he was the last descendant of Charlemagne to rule in Germany.

Louis (Ludwig) (894-911) called the German King of the East Franks son of Louis I the German ruled over the district lying between the Rhine and the Elbe.

Louis I (Ludwig) (840-840) called the Iron Emperor of the West succeeded his father Charlemagne in 840.

Louis II (Ludwig) (840-840) called the Younger son of Louis I the Iron Emperor succeeded his father Lothar in 845 he ruled over 31 dom.

Louis III (Ludwig) (840-840) called the Child and Emperor son of Louis I the Iron Emperor was deposed by his father in 840 he captured him and deprived him of his sight.

Louis IV (Ludwig) (840-840) succeeded his father Louis I Duke of Bavaria in 1294.

Louis IX (Ludwig) (840-79) called the Saint Emperor King of the West Franks succeeded his father Charles the Bald in 877.

Louis III (Ludwig) (840-840) son of the preceding shared the kingdom with his younger brother Carloman (879-81).

Louis IV (Ludwig) (921-94) succeeded his father Charles the Simple in 936.

Louis V (Ludwig) (937-87) called the Lambent the last of the Carolingians king succeeded his father Lothar in 986 was deposed by Hugh Capet.

Louis VI (1076-1137) called the Gros King of Fr succeeded his father, Philip I in 1108 he carried on a war with Henry I of Eng.

Louis VII (1120-80) succeeded his father, Louis VI in 1127 took part in the second Crusade 1147-49 in 1142 he divorced his wife Eleanor of Aquitaine who thereupon married Henry (count of Anjou afterwards king of Eng)

Louis VIII (1187-1226) son of Philip Augustus was in 1216 offered the crown of England by the discontented barons but on the defeat of his army at Lincoln (1217) returned to Fr He succeeded his father (1223)

Louis IX (1215-70) Saint Louis succeeded Louis VIII in 1226 under the regency of his mother Blanche of Castile in 1229 the county of Toulouse was incorporated with the Fr kingdom

Louis X (1289-1316) called le Hutin (the Quarrelsome) succeeded his father Philip the Fair in 1314

Louis XI (1414-83) succeeded his father Charles V in 1461

Louis XII (1466-1515) son of Charles Duke of Orleans succeeded Charles VIII in 1498

Louis XIII (1601-43) succeeded his father Henry IV in 1610

Louis XIV (1638-1715) succeeded his father Louis XIII in 1643

Louis XV (1710-74) called le Bien Aimé succeeded his great grandfather Louis XIV in 1715 under the regency of Philip Duke of Orleans nephew of Louis XIV

Louis XVI (1754-93) succeeded his grandfather Louis XV in 1773 in 1770 he had married Marie Antoinette daughter of Maria Theresa of Austria following the revolution he was executed Jan 21 1793 476 477 481

Louis XVII (1785-93) son of Louis XVI was regarded as king by the Royalists after the execution of his father he died in mysterious circumstances

Louis XVIII (Comte de Provence) (1755-1824) younger brother of Louis XVI ascended the throne of Fr in April 1814 was expelled by Napoleon on his return from Elba but regained the throne in July 1815

Louis Philippe (1773-1830) King of the Fr son of Philippe (Louis) Duke of Orleans after the July rev in 1830 he was proclaimed king but his rule was unpopular and a rev (Feb 1836) forced him to seek refuge in Eng

Lovett Simon Fraser 12th Baron (1667-1747) Scot Jacobite fought against the Pretender (1715) and took part in the Young Pretender (1745) and was executed

Lovelace Richard (1618-88) Eng poet fought for Charles I (1645) imprisoned by the Parl (1649) died in poverty poems include *Stone Walls Do Not a Prison Make* and *To Lucasta on Going to the Wars*

Lover Samuel (1797-1868) Ir novelist abandoned miniature painting for literature and wrote *Handy Andy* (1842) etc

Lowe Sir Hudson (1769-1844) Brit gen governor of St Helena during Napoleon's captivity (1815-17)

Lowell James Russell (1610-91) Amer writer among his notable works are *The Vision of Sir Launfal* *The Ingold Papers* and *A Tale for Critics* (all 1848) *My Study Windows* (1871) and *The Old English Dramatists* (1892)

Loyola St Ignace of (Luis Lopez de Velasco) (1491-1556) bp divine founder of the Society of Jesus and its first general (1541-56) for a time a soldier in Paris (1528) became acquainted with Savier and other enthusiasts with whom he founded a society for converting the heathen instructing the young and restoring the power of the Roman Church (1534)

Lubbock Sir John See Avebury.

Lucan (Marcus Annianus Lucanus) (39-65) Rom poet his *Pharsalia* describing the war between Caesar and Pompey is an epic in ten books

Lucas Edward Verrall (born 1868) Eng man of letters a master of the light touch in fiction and a versatile accomplished essayist ('Life of Charles Lamb', *London Lavender*, *The Gentlest Art*)

Lucas John Heymour (1849-1923) Eng painter painted fresco in Roy Exchange, William the Conqueror Granting Charter to City of London and many other historical pictures

Lucian (120?-180?) Gk satirist his principal works chiefly in the form of dialogues ridicule the religion and philosophy of the time

Lucilius (180? 103? B.C.) Rom satirist writings deal with everyday life

Lucius I (died 253) Pope succeeded Cornelius (252)

Lucius II (died 1145) Pope succeeded Celestine II (1144)

Lucius III (died 1185) Pope succeeded Alexander III (1181)

Lucræti (Titus Lucretius Carus) (1st cent B.C.) Rom poet *De Rerum Natura* expounds the Epicurean system of philosophy

Lucy Sir Henry William (1845-1924) Eng journalist contributed racy humorous accounts of parl proceedings to *Punch* under pen name of Foby M.P. for many years

Luftendorf Erich von (born 1866) Ger gen the Ger strategy during the World War (1914-18) was mainly his

Luftow Edmund (1817?-82) Eng politician served in the Parl army during Civil War took part in the trial of Charles I commanded in Ire after the death of Ireton (1651) at Restoration fled to Switzerland (1660)

Ludwig I (1786-1868) King of Bavaria ascended the throne (1817) abdicated (1848)

Ludwig II (1845-88) King of Bavaria partner of Wagner doped on the ground of insanity (1888)

Lumi Bernardino (1470?-1635?) It painter many of his best pictures are at Milan

Luther Martin (1483-1546) Ger Protestant reformer son of a minor born at Leoben entered an Augustinian monastery (1505) publicly burnt the bull issued against him by Leo X (1520) upheld his views before the Diet of the Empire assembled at Worms (1521) in 1524 he renounced his monastic vows and in 1530 the Protestant faith was formulated in the Confession of Augsburg drawn up by Melancthon Luther's translation of the New Testament was published in 1524 and that of the whole Bible about ten years later

Lyall Edna (pen name of Ada Ellen Bayly) (1818-1908) Eng novelist her stories distinguished by original plots and truthful background ('Won by Waiting', *Donovan*, *The Hinderers*)

Lyall Sir Charles (1797-1875) Scot geologist published *Principles of Geology* (1830) which substituted the Huttonian doctrines for the old catastrophie theory thus raising geology to the rank of a branch of inductive science

Lyle or Lally John (1553?-1606) Eng dramatist and romance writer his novel of manners *Euphues* written in fantastic style gave rise to the term euphuism (plays *Phrynia*, *Uidas*, *Love's Metamorphosis*)

Lysander (died 30 B.C.) Spartan admiral and general defeated the Athenian fleet at Notium (407 B.C.) in 404 captured Athens when he set up the Thirty Tyrants lost much of his power after the accession of the Spartan king Agésilus (398)

Lycaenæus (360-281 B.C.) Macedonian general on the death of Alexander the Great (323) became ruler over Thrace in 286 seized the throne of Macedonia was slain in battle with Seleucus

Lyttelton or Littleton Sir Thomas (circa 1406-81) Eng judge his *Treatise on Tenures* in Norman Ir is considered the foundation of the Eng law of property

Lytton Edward George Earle Lytton Bulwer-Lytton Baron (1803-73) Eng novelist among his novels are *The Last Days of Pompeii* (1834) *Rienzi* (1835) *Ernest Maltravers* (1837) *Alice* (1838), *Zanoni* (1841) *The Last of the Barons* (1843) *Harold* (1848) *The Caxtons*

(1849) *My Novel* (1863) etc in 1866 he was raised to the peerage

Lytton Edward Robert Bulwer-Lytton Earl of (1831-91) son of the preceding was viceroy of India (1876-80) published several volumes of poetry under the pseudonym of Owen Meredith

M

Maarlena Maarten pen name of J. M. W. Schwartz (1858-1915) Dutch novelist wrote in Eng *God's Fool* (1892) and other novels dealing with modern Dutch life

Maebius Jan (died 1632) Flemish painter so called from his birthplace (Mauvege) real name Jenni Goearlt his Adoration of the Kings is in the National Gallery London

MacAdam John Loudon (1756-1836) Scot engineer and inventor 878

MacAdoo William Gibbs (born 1868) Amer politician Sec of Treasury under Pres Wilson (1913-18) Director general of Rlys during World War (1917-19)

Macaulay Thomas Babington Lord (1800-59) Eng historian and essayist his best known works are *History of England* *Essays* and *Lays of Ancient Rome*

Macbeth (died 1057) King of Scot usurped throne in 1040 having defeated and slain Duncan killed by Malcolm (rumour Duncan's son central figure of Shakespeare's tragedy)

McCarthy Justin (1880-1912) Irish historian novelist and nationalist leader in succession to Parnell wrote *History of Our Own Times* and *Dear Lady Darnley* and other novels

McCarthy Lillah Brit actress managed Little Theatrical London (1911) repertoire includes *Marcia in The Sign of the Cross* and many of Shakespeare's and Bernard Shaw's heroines

McClure Sir Robert John Le Mesurier (1807-78) Brit Arctic explorer went with Back's expedition (1846) and accompanied Sir James Ross (1848) in 1850 in command of the *Sweetwater* discovered N.W. Passage

Macdonald Flora (1722-90) Scot Jacobite heroine helped Prince Charles Edward to escape in 1748 after Culloden meeting with Dr Johnson *picture 794*

Macdonald George (1824-1905) Scot novelist and poet 3 years a congressional minister sympathetic portrayal of Scot life novels include *David Elginbrod* and *Alec Forbes of Howglen*

MacDonald James Ramsay (born 1866) Brit statesman M.P. for Leicester (1906) leader of Labour Party (1911) leader of Opposition (1922) first Labour Prime Minister (1924)

Macdonald Sir John Alexander (1815-91) Canadian statesman first premier of the Dominion in power for 19 years

Macdowell Edward Alexander (1881-1908) Amer musical composer known as the Wordsworth of Music works include *Indian Suite* and *Woodland Sketches*

Macgill Patrick (born 1890) Irish novelist and poet work coloured by early life as navy and by World War service writings include *Children of the Dead End* (1915) and *Story of Loos* (1916)

MacGregor John (1825-82) Scot traveller toured Europe in his canoe *Rob Roy* (1865) described his adventures in *A Thousand Miles in the Rob Roy Canoe*

Macgillivray Niccolò (1460-1527) It writer and statesman sec of Florentine republic (1498-1512) in his most famous works *The Prince* and the *Discourses* describes his ideal republic and monarchy in which morality is subordinated to political expediency

Macintosh Charles (1766-1848) Scot chemist inventor of waterproof fabrics and of various chemical processes

McKenna Reginald (born 1868) Brit statesman and financier First Lord of Admiralty (1908-11) Home Sec (1911-15) Chancellor of Exchequer (1915-16) became chairman of London Joint City and Midland Bank (1910)

MACKENSEN

Mackensen, August von (born 1849), Ger general associate of Ludendorff and Hindenburg in World War commanded decisive offensive against Serbia and Rumania

Mackenzie, Sir Alexander (1755-1820), Brit explorer employee of N.W. Fur Co discovered Mackenzie R. and was first white man to reach Pacific overland

Mackenzie, Alexander (1822-92) Canadian statesman born in Scot premier (1873-78) introduced vote by ballot

Mackenzie, Sir Alexander Campbell (born 1847) Scot composer principal of the Royal Academy of Music (1888) works include the operas *Colombus* (1884) and *The Troubadour* and the oratorio *The Rose of Sharon* (1884)

Mackenzie, Compton (born 1883) Eng novelist and playwright son of the actor Edward Compton his novels include 'Carnival on Smolton Street,' and 'Flashers Mead'

Mackenzie, Sir Morrell (1857-92) Brit throat specialist his advice on the last illness of the Crown Prince of Ger (Frederick III) led to a violent controversy

McKinley, William (1843-1901) 25th Pres of U.S.A. events of his term include the Sp war annexation of Hawaii and part of Samoa and Amer intervention in China assassinated by an anarchist

Maclaine, Charles (1690?-1797) Irish actor and dramatist excelled as shlylock his best plays were *The Man of the World* and *Love on a Maze*

Maclaren, Ian, pen name of Rev John Watson (1850-1907) Scot author pioneer of 'hailyard school' novels include *Beside the Bonnie Brigs Bush* (1894) and *The Day of Auld Lang Syne*

Maclennan, Kaid Sir Harry (1848-1920) Brit soldier entered service of Sultan of Morocco captured by brigand Rasoul in 1907 and ransomed for £20,000

Maclise, Daniel (1806-70) Brit painter his most famous works are *The Meeting of Wellington and Blucher* and *The Death of Nelson* on the walls of Westminster Palace

MacMahon, Marie Edmé de (1808-93) Fr soldier and statesman Duke of Magenta and marshal of Fr (1857) crushed Communist rising (1871) his reactionary policy as pres of republic (1873-79) led to resignation

MacMonnies, Frederick William (born 1863) Amer sculptor among chief works are Nathan Hale statue New York and Battle Monument West Point

Macnamara, Thomas James (born 1861) Brit politician long a school teacher and editor of *The Schoolmaster* Sec of Admiralty (1908-20) Minister of Labour (1920-22) has written much on educational subjects

Macnaughtan, Sarah Brown (1861-1916) Brit novelist *Red Cross nurse* (1914-15) novels include *A Lame Dog's Diary* (1905) and *The Expensive Miss Du Cane* (1907)

MacNeill, John Gordon Swift (born 1849) Irish politician and jurist Nationalist M.P. for S. Donegal (1887-1918) great authority on constitutional procedure responsible for abolition of flogging in Navy

Macpherson, Ian (born 1882) Brit politician Chief Sec for Ire (1918) Minister of Pensions (1920) Privy Counsellor (1918)

Macpherson, James (1736-96) Scot author professed translator (now generally believed to be author) of poems by a Gaelic poet Ossian

Macready, Sir Cecil Frederick Nevil (born 1862) Brit soldier, son of the actor W.C. Macready adjutant general to Expeditionary Force (1914) commander of metropolitan police (1918) commander in chief in Ire (1920)

Macready, William Charles (1798-1878) Brit actor he first appeared in London (1816) at Covent Garden achieved great successes as Richard III Hamlet and Coriolanus leading actor at Drury Lane Theatre (1823-36)

MacSwiney, Terence (1870-1920) Irish political leader Lord Mayor of Cork an organizer of volunteer movement hunger striker against imprisonment

for sedition died of starvation in Brixton Prison London

MacWhorter, John (1889-1911) Scot artist R.A. (1893) his pictures are chiefly Highland and Alpine landscapes among them are *Kilnass Talc* and *June in the Austrian Tyrol* (Tate Gallery London)

Madison, James (1751-1836) 4th Pres. of U.S.A. elected democ Pres. (1808 and 1812) prominent in fighting Alien and Sedition Acts as being violations of the Constitution

Maezmas, Gaus (died 8 B.C.) wealthy Rom patron of Horace Virgil and other men of letters name proverbial as that of a liberal patron of the arts

Maeterlinck, Maurice (born 1862) Belg dramatist and poet shows mystery beneath surface of everyday life Nobel Prize for literature (1911) plays include *Pelleas et Melisande* and *The Blue Bird* essays 'The Life of the Bees' 'The Treasure of the Humble' etc

Magellan, Ferdinand (Fernão de Magalhães) (died 1521) Port navigator 1485

Magaffy, Sir John Pentland (1839-1910) Irish scholar professor of ancient history Trinity College Dublin (1861-1900) provost (1914) works include *Social Life in Greece from Homer to Menander* and *The Silver Age of the Greek World*

Mahan, Alfred Thayer (1840-1914) Amer naval officer and historian his authoritative work *The Influence of Sea Power upon History* was the first on the subject

Mahmud I (1696-1754) Sultan of Turkey most of reign spent in warfare against Austria and Russia recovered Belgrade but lost the Crimea to the Rus

Mahmud II (1785-1839) Sultan of Turkey suppressed Janissaries forced to accept independence of Greece

Mahmud of Ghazni (971-1030) Afghan conqueror invaded India and founded Mohammedan rule there

Mahomet See Mohammed

Maimonides, Moses (1135-1204) Jewish rabbi and philosopher one of the principal Jewish teachers chief work, *Guide to the Perplexed*

Maine, Sir Henry James Sumner (1822-88) Brit jurist his chief works were *Ancient Law* *Village Communities*, *In the Past and the West* and *Early History of Institutions*

Maintenon, Françoise d'Aubigné, Marquise de (1635-1719) 2nd wife of Louis XIV of France had great political influence founded a girls school at St Cyr

Maitland, Frederick William (1860-1906) Eng jurist and historian principal works *History of English Law* (with Sir F. Pollock) *Canon Law in Eng* and *Domesday Book and Beyond*

Makino, Vassunt (born 1861) Japanese statesman Min of Education (1906-8) of Agriculture and Commerce (1911-12) of Foreign Affairs (1913-14) attended Peace Conference (1919)

Malcolm III (died 1093) King of Scot known as Canmore or Great Head succeeded Macbeth (1057) several times invaded Eng killed at Malcolm's Cross near Alnwick

Malebranche, Nicolas (1638-1715) Fr philosopher follower of Descartes chief work *The Search After Truth*

Malles, Lucas pen name of Mary St Leger Harrison (born 1852) Eng novelist daughter of Charles Kingsley (*The Wages of Sin* *History of Sir Richard Calmady*)

Malibran, Marie Flaminie (1808-36) Fr singer daughter of Manuel Garcia first appeared in London in 1825 in *The Barber of Seville* one of the favourite operatic singers of her day

Malherbe, Stéphane (1842-98) Fr poet leader of the symbolists his works include *L'Après midi d'un Faune* and translations of Edgar Allan Poe's poems

Mallock, William Hurrell (born 1849) Eng author wrote *The New Republic* 'Is Life Worth Living?' *honor* *Equality* *The Veil of the Temple*

Mallory, George Leigh (1880-1924), Brit

MARCEL

mountaineer, made record climb of 26,800 ft up Mt Everest (1922) killed in an expedition (1924)

Mallory, Sir Thomas (died 1970) Eng writer translator compiler and part author of the Eng prose romance *Morte d'Arthur*

Malpighi, Marcello (1628-94) It physician first one of the first to use the microscope for studying animal and vegetable structure first to attempt the anatomy of the brain

Malthus, Thomas Robert (1766-1834) Eng economist originated Malthusianism the theory expounded in his *Treaty on Population*

Mandeville, Sir John (John de Mandeville) reputed writer of a 14th cent book of travels

Manet, Edouard (1832-83) Fr painter most important in water of impressionism pioneer of *plein air* school his *Music at the Tuileries* is in the National Gallery London

Mangan, James Clarence (1803-49) Irish poet morbid genius who sincerely expressed the tragedy of Irish aspirations his poems edited (1903) by D.J.O'Donnell, but included autobiographical biographical *The Bachelors*

Mangin, Charles Marie Emmanuel (1866-1922) Fr general corps commander at Verdun (1918) 6th Army commander in Alsace offensive (1917) wrote *Comment l'Armée a Gagné* a masterly review of the World War

Mann, (died 276) Peruvian religious reformer founded Munchaism in which he attempted to combine Christianity with the old Peruvian Shamanism

Mann, Danielle (1804-57) Venetian patriot arrested by the Austrian gov (1848) was freed by the people and made pres of the Venetian republic took leading part in defence of Venice after whom fall he was exiled

Mann, Tom (born 1886) Eng socialist in labour movement prominent in organization London dock labourers' strike of 1889 sec of indep labour party and National Democratic League

Manning, Henry Edward (1808-93) Eng cardinal became Archbishop of Canterbury (1841) in 1841 he moved into the Rom church in 1850 succeeded Dr Wiseman as Archbishop of Westminster made cardinal (1854)

Manoel II (born 1843) King of Port succeeded (1909) deposed and murdered (1910) which led to a republic

Mansard or Mansart, Jules Hardouin (1646-1708) Fr architect in chief of French Mansard who invented Mansard roofs de la 18th cent of Versailles the chateau of Vaux and the dome of the Invalids

Mansfield, Richard (1673-1707) Amer actor among his most successful roles were the doubled title part in *Dr Jekyll and Mr Hyde* *Arch of Ill* and *Cyrano de Bergerac*

Manson, Sir Patrick (1844-1922) Brit physician suggested that the parasite of malaria was carried by the mosquito wrote *Tropical Diseases*

Manzoni, Andrea (1831-1906) It painter his best pictures are the ones at Hampton Court called *The Triumph of Julius Caesar*

Manzoni, It family of printers who flourished during the 16th cent 582, 593

Manson, Alessandro (1794-1873) It novelist and poet his magnificent novel *I Promessi Sposi* (*The Betrothed*) has been called the best historical novel ever written

Mars, Jean Paul (1744-97) Fr revolutionist in Sept 1793 began publishing the extremist journal *Le Père du Peuple* denounced the Girondins was tried by the Revolutionary Tribunal and executed murdered by Charlotte Corday, 296, 297, 298

Marbot, Jean Baptiste, Baron de (1782-1854) Fr soldier remembered chiefly for his *Memoirs* which give a vivid and fascinating picture of Napoleon's campaigns

Marcel, Etienne (du 1358), Fr popular leader provost of the merchants of Paris in his attempt to secure municipal reforms headed the people against the

Dauphin and joined the Jacques killed white opening gates of Paris to King of Navarre

Marcellus, Marcus Claudius (268? 208 B.C.) Rom general during the 2nd Punic war captured Syracuse after a two years siege known as the sword of Rome

Marcus Polo See Polo

Marcus, Guglielmo (born 1874) It scientist inventor of wireless

Marcus Aurelius See Aurelius

Margaret, Saint (1045-93) Scot queen sister of Edgar Atheling with whom she fled to Scot after the battle of Hastings canonized on account of benefactions to the church

Margaret of Anjou (1490-82) Queen of Eng married Henry VI (1445) defeated Richard Duke of York at Wakefield (1460) lost the battle of Tewkesbury (1471) fled to Scot finally crushed by Edward at Tewkesbury

Margaret of Denmark (1313-1412) Queen of Denmark became queen-consort of Norway on the death of her husband Haakon VI united the three Scandinavian kingdoms by the union of Olmuk (1397)

Margaret of Parma (1522-86) Duchess of Parma appointed regent of the Netherlands (1569) ruled fearlessly but resigned after revolt of Netherlands (1587)

Margaret of Valois (1492-1549) Queen of Henry II King of Navarre supported the Reformation part author of the Heptameron story cycle modelled on the Decameron

Margaret of Valois (1553-1615) Queen of Fr first wife of Henry IV married just before the day of St Bartholomew when she had a narrow escape from the massacre the King Margot of France

Maria Theresa (1717-80) Queen of Hungary married Francis of Lorraine (1736) ruled on the Seven Years War with the help of Fr against Prussia took part against his will in the first partition of Poland

Maria II, da Gloria (1819-53) Queen of Port succeeded on abdication of her father Dom Pedro (1825) resisted rebellions on part of her uncle Dom Miguel

Maria Antonette (1755-1793) Queen of Fr

Mariette, Auguste Edouard (1811-91) Fr Egyptologist discovered the Serapeum and the colossi temple of the Sphinx Giza superintended many famous excavations (Monuments of Upper Egypt)

Marius, Gualbertus (1569-1625) It poet established a new school of poetry by his witty elegies and epigrams

Marius, Gaius (157-85 B.C.) Rom general conquered Jugurtha defeated the Teutones and Cimbri carried on war with Sulla was defeated and compelled to fly to Carthage was seven times consul of Rome

Marc Antoniv See Antonius, Marcus

Markham, Sir Clements Robert (1830-1916) Eng geographer joined Arctic expedition (1850) funds for Scott's South Polar voyage raised almost entirely by his efforts (Franklin's Lost Steps Travels in Peru and India) 11

Markham, Edwin (born 1872) Amer poet his life as a farm hand reflected in The Man with the Hoe wrote against child labour (The Children of Bondage)

Markiewicz, Constantine George, Countess (born 1864) Irish politician sentenced to death after rebellion of 1916 but pardoned first woman member of Brit Parl (1918) but did not sit

Marlborough, John Churchill, 1st Duke of (1650-1722) Eng soldier deserted James II at the Revolution but though created earl and commander in chief by William III, intrigued with his former master won the victories of Blenheim Ramillies Oudenarde, and Malplaquet dismissed on a charge of peculation carried out many reforms in the army

Marlborough, Sarah Jennings, Duchess of (1660-1744) married Churchill (1678) induced Anne to desert her father and became all powerful supplanted by Mrs Abigail Hill

Marlowe, Christopher (1564-93) Eng

dramatist and poet an early pioneer of Elizabethan drama and the mentor of Shakespeare the father of Eng blank verse (Tamburlaine Faustus The Jew of Malta Edward II with Christopher Marlowe and Flender) killed in a brawl at Deptford

Marmont, Auguste Frédéric Louis Viesse de (1773-1852) Fr soldier after distinguishing himself at Lodi and Marengo was made governor of Illyria by Napoleon (1809) defeated at Salamanca (1812) by Wellington deserted Napoleon on his abdication went into exile with the Bourbons

Marmora, Alfonso Ferrero della (1804-1878) It general and statesman served in the Sardinian army in the war of (1848-49) put down the revolt of the Mazzinists reorganized the It army

Marschetti, Carlo, Baron (1801-1868) It sculptor naturalized Frenchman he executed the Inkerman Memorial (St Paul's) and the statue of Lord Clyde (Waterloo Place) R.A. (1866)

Marot, Clément (1496-1544) Fr poet his writings marked the beginning of a break with conventional tradition (Adolescence Clementine)

Marquette, Laurent Honoré (1848-1920) Fr sculptor famous for his statue of Victor Hugo at Bordeaux and many classical figures

Marquette, Jacques (1687-75) Fr explorer lived among Amer Indians as a missionary explored the Mississippi with Louis Joliet

Marryat, Florence (1838-99) Eng novelist daughter of Frederick Marryat wrote many popular novels (Love's Conquest Tom Tiddler's Ground Gentleman and Courier)

Marryat, Frederick (1792-1848) Eng novelist and sailor served in the Burma war his stories of life at sea among the best of their kind (Peter Simple Midshipman Easy Misterman Reddy)

Marshall, Archibald (born 1866) Eng novelist depicts life of Eng country gentlemen and their families (The Eldest Son The Old Order Changeth The Hall and the Gate)

Marshall-Hall, Sir Edward (born 1858) Eng lawyer and politician brilliant criminal advocate in many famous trials entered Parl (1900) Recorder of Guildford (1916)

Martial (Marcus Valerius Martialis) (43-104?) Rom poet born in Spain patronized by the Emperor Domitian wrote brilliant epigrams in the spirit of Juvenal

Martin Gregory (1540? 1582) Eng scholar author of the Douai translation of the Bible 1511

Martin, Homer (1836-97) Amer artist one of the three great Amer landscape painters the others being Inness and Whistler (Harps of the Winds A Newport Landscapes)

Martin, Sir Theodore (1816-1909) Eng man of letters best known for his translations of Horace Elmer and Dante wrote biography of Prince Consort

Martin I (died 655) Pope succeeded Theodore I (649) arrested by Emperor Constantine II for attacking the monothelite heresy surrendered to save bloodshed

Martin IV (1210-85) Pope elected (1281) supported Charles of Anjou against Peter III of Aragon

Martin V (1368-1431) Pope elected at the Council of Constance (1417) when John XXIII was deposed the Great Schism being thus brought to an end

Martineau, Harriet (1802-76) Eng writer of Huguenot descent sister of James Martineau an able exponent of nineteenth century philosophic radicalism (Illustrations of Political Economy)

Martineau, James (1803-1900) Eng theologian great unitarian minister and thinker believed in the intuitionist as against the rationalist mode of inquiry (Studies in Christianity)

Martinez Campos, Arsenio (1840-1900) Sp gen and statesman conspired against the republic in favour of Alfonso XII, whom he placed on the throne

Martinez de la Rosa, Francisco (1780-

1862) Sp statesman and author twice prime minister came under influence of French romanticism his play *The Conspiracy of Venice* ushered in romantic drama of Spain

Martyn, Henry (1781-1912) Eng orientalist and missionary to the East obtained a chaplaincy in India (1804) author of Hindustani and Persian versions of the New Testament

Marvell, Andrew (1621-78) Eng poet and politician set to Milton (1657) his satires and verses on gardens exquisite in form and beauty

Marx, Karl (1818-83) Ger socialist founder of scientific socialism lived much in Eng and founded International Working Men's Association wrote *Das Kapital*

Mary (born 1867) Queen of George V of Eng to whom she was married in 1893

Mary (born 1897) Brit princess only daughter of George V of Eng and Queen Mary married to Viscount Trevellick eldest son of the Earl of Harewood Feb 28 1922

Mary I (1516-58) Queen of Eng 1516

Mary II (1682-94) Queen of Eng 1688

Mary Stuart (1542-87) Queen of Scots, 1518-1517

Mary Tudor (1496-1553) Queen of Fr daughter of Henry VII married Louis XII in 1514 and after his death in the following year Charles Brandon Duke of Suffolk their daughter being the mother of Lady Jane Grey

Masaccio (1401-28) nickname of Tommaso Gudi It painter first to paint figures in proportion to architectural background under the influence of Donatello developed aerial perspective (Child with Angels in National Gallery)

Masaryk, Thomas Garrigue (born 1850) Czechoslovak statesman and man of letters became first pres of newly created Czechoslovak republic (1920)

Masani, Pietro (born 1863) It composer his claim to fame rests on one opera, *Cavalleria Rusticana*

Masfield, John (born 1873) Eng poet and dramatist served during World War in East and Gallipoli (Salt Water Ballads The Everlasting Mercy The Tragedy of Man Poems and Ballads)

Masman, Samuel Cunliffe Lister, 1st Baron (1815-1906) Eng inventor and manufacturer invented silk reeling machine and velvet loom

Mashevsky, Nevel (1732-1811) Eng astronomer royal founded the Natural Almanack compiled catalogue of fundamental stars and systematized publication of results obtained at Greenwich Observatory

Mason, Alfred Edward Woodley (born 1866) Eng novelist and playwright, novels include *Miranda of the Biscay* *The Truants* *Plays The Witness for the Defence At the Villa Rose*

Mason, Sir Joseph (1790-1881) Eng manufacturer and philanthropist specialized in pin making and electro plating

Maspero, Gaston Camille Charles (1846-1918) Fr Egyptologist keeper of the Boule Museum wrote *Historic Ancienne des Peuples de l'Orient Les Contes Populaires de l'Egypte Ancienne*

Massey, André (1706?-1817) Duke of Rivoli Prince of Fassing greatest of Napoleon's marshals defeated Rus at Zurich (1799) defeated by Wellington in Peninsular War and disgraced by Napoleon

Massey, Jules (1842-1912) Fr composer prolific composer of operas the best of which are *Idée Le Jongleur de Notre Dame* and *Mason*, his style distinguished by delicate treatment of love scenes

Massey, Gerald (1828-1907) Eng poet and

appears a Sonnets

Massinger, Philip (1582-1640) Eng dramatist collaborated with Fletcher Middleton and other Elizabethan dramatists his chief independent piece, *A New Way to Pay Old Debts*

Massingham, Henry Wilham (1840-1924) Eng journalist editor of *The Star* and *The Daily Chronicle* for 16 years editor of *The Nation*

Mathew, Theobald (1790-1856) Ir temperance advocate said to have converted nearly half the adult population of Ir to abstinence

Mathews, Charles (1776-1835) Eng comedian first appeared professionally in Dublin (1794), played Don Manuel in *She Would and She Would Not* at Drury Lane (1804) became joint proprietor of the Adelphi

Mathews, Charles James (1803-1878) Eng actor son of Charles Mathews whom he almost rivalled in popularity his favourite plays were *Used Up*, *Cool as a Cucumber* and *My Aunt's Daughter*

Matilda of Tuscany (1046-1115) the Great Countess married first Godfrey of Lorraine and secondly Guelf Duke of Bavaria lost much of her estates in struggle on behalf of the papacy but recovered them

Matys, or Matsys, Quentin (1466-1530) Flemish painter originally a blacksmith his pictures include *Birth of Christ* and *Story of St Anne*

Matthäson, Johann Ger musician friend of Handel 314, 315, 316, 317

Matthias Corvinus (1443-1490) King of Hungary proclaimed king in 1483 engaged in successful wars with the Turks Poles and Frederick III he saved the Bohemian crown from the Pope on condition of excommunication, the Hussites

Maude, Cyril (born 186-) Eng actor noted for his restrained humorous performances of eccentric character parts such as Grumpy built the Plymouth Theatre

Maude, Sir Frederick Stanley (1844-1917) Brit soldier 1474

Maughan, William Somerset (born 1874) Eng novelist and playwright (*Lady of Lambeth*, *The Moon and Six Pence*, *The Unknown* and *Play Our Better*)

Maupassant, Henri Guy de (1859-92) Fr novelist disciple of Flaubert under whom he studied for seven years he coming a master of the short story (*The Piece of String*, *The Neck*, *Lace*, *A Life*, *Mrs Hérict*)

Maurice, John Frederick Denison (1800-1872) Eng theologian and social reformer for some time edited the *Athenaeum* professor of Eng literature and history (1840) and of theology at King's College London (1846) his *Theological Essays* (1843) caused his removal from King's College

Maur, Matthew Fontaine (1806-1873) Amer biographer and naval officer of Fr descent made a voyage round the world (1826) published marine charts and sailing directions at the Bureaux (conference (1857) his system was adopted by most nations (*The Physical Geography of the Sea*)

Mawson, Sir Douglas (born 1882) Eng polar explorer accompanied Sir I Shackleton on Antarctic expedition (1907) commanded Australian expedition (1911-14) discovering King George V Land

Max, Adolphe (born 1889) Belg administrator burgomaster of Brussels during World War resisted Ger occupation and refused to pay levy imposed on city was imprisoned in Ger

Max of Baden, Prince (born 1867) Ger statesman and soldier as imperial Chancellor (1918), initiated negotiations for armistice and persuaded Kaiser to abdicate

Maxim, Sir Hiram S (1840-1916) Eng inventor born U.S.A. invented maxim automatic machine gun and helicopter aeroplane

Maxim, Hudson (born 1853) Amer inventor first to make smokeless powder in U.S.A. invented explosive known as maximate brother of preceding

Maximilian I (1459-1519), Holy Rom. Emperor son of Emperor Frederick III emperor (1493) married Mary of Burgundy (1477) and thus obtained the Netherlands formed with the Pope Sp and Venice a league against Ir

by arranging judicious alliances for his son and grandson gained Sp, Hungary and Bohemia

Maximilian II (1527-76) Holy Rom. Emperor son of Ferdinand I married a daughter of Charles V elected king of Romans (1562) and of Hungary (1563) and became emperor (1564) tried to unite Ger Protestants

Maximilian, Joseph (1756-1825) king of Bavaria succeeded as elector (1799) made 1st king of Bavaria by Napoleon (1805)

Maximilian II (1811-1864) king of Bavaria son of Louis I succeeded (1848) strong partisan of Austria and opposed reconstruction of Ger father of the mad kings Ludwig II and Otto

Maximilian I, the Great (1473-1551) Elector and Duke of Bavaria part founder of Cath League which opposed Prot union during Thirty Years War

Maximilian (1832-87) 1 Emperor of Mexico brother of Emperor Francis Joseph proclaimed emperor after invasion (1863) losing the support of Fr, was betrayed and shot

Maximian, Gaius Julius Vercus (died A.D. 298) Rom. emperor employed by Alexander Severus to organize army obtained the purple after his resignation became military dictator but aroused hatred by his tyranny and was killed

Maximus Magnus Clemens (died circa 388) Rom. emperor rebelled against Gratian proclaimed emperor by his troops in Britain conquered Gaul and was recognized (383) subdued Ir (387) but defeated and beheaded by Theodosius

Max Müller, Frederick (1823-1900) Ang. Ger philologist born Dessau son of Wilhelm Müller the poet educated at Leipzig Berlin and Paris professor of modern languages at Oxford (1874) Lectures on the Science of Language, marked by stimulation, research and scholarship edited *The Sacred Books of the East*

Maxwell, James Clerk (1831-1879) Scot physicist professor of physics and astronomy at King's College London (1860-68) researches in electro magnetism paved the way for radio telegraphy (*Electricity and Magnetism*)

Maxwell, William Babington (born 1848) Eng novelist son of W. F. Braddon skilful technique and deep human interest (*The Ragged Messenger*, *Visions*, *The Guarded Flame*)

Maxwell, Sir William Stirling (1818-78) Scot writer (true name name of Maxwell in 1866) married Hon. Mrs Norton (1877) Lord Rector of St Andrews (1862) (*Annals of the Antiquities of the Claverhouse*)

May, Phil (1864-1903) Eng black and white artist chiefly depicted London low life used fewest possible lines first successes achieved on *The Sydney Mail* later associated with *Lunch* and *The Graphic*

Mayo, Richard Southwell Bourke, 6th Earl of (1822-72) Brit statesman thrice Chief Sec for Ire as Gov Gen of India reorganized finances and public works assassinated by a convict in the Andaman Islands

Mayo, Henry Thomas (born 1836) Amer sailor demanded apology and salute after Tampico incident (1914) Admiral and Commander in Chief of U.S. Atlantic Fleet (1916-17)

Masarin, Jules (1802-61) Ir cardinal and statesman born in Italy came to Fr (1834) asuncio extraordinary of Pope favoured by Anne of Austria and Richelieu whom he succeeded as cardinal continued his policy of strengthening power of crown after Thirty Years War defeated nobles in civil war of the Fronde

Masappa, Ivan (1644-1709) Cossack chief said to have been bound to a wild horse in revenge for an injustice rescued by Cossacks became their hetman raised to power by Peter the Great deserted him for Charles XII with whom he suffered defeat

Massini, Giuseppe (1805-72) It patriot founded Young Italy party expelled

from Fr and Switzerland took refuge in Eng served under Garibaldi (1848) and became member of triumvirate after breakup of Ir republic returned to Eng where he secretly organized rising rejoined Garibaldi in revival of Young Italy movement (1859) but refused to recognize monarchist constitution The Duties of Man and other essays breathe spirit of selfless idealism

Mead, George Gordon (1815-72) Amer soldier at outbreak of Civil War appointed brigadier general of volunteers completely defeated Lee at Gettysburg

Mearns, John (1756?-1809) Eng navigator explored coast of Alaska sailed to China by way of Hawaiian Islands

Medeas, Catherine de' (1319-89) Queen regent of Fr daughter of Pope Clement VII and queen of Henry II acted as regent during the minority of her second son, Charles IX she instigated massacre of St Bartholomew

Medes, Cosimo (the Elder) (1380-1464) Florentine banker business leader of Florence while remaining nominally a private citizen patron of literature and art

Medes, Cosimo I (1519-1574) Florentine ruler became duke (1537) and created Grand Duke by Pope Pius V (1569) acquired Vienna and an established university of Pisa and a scientific library

Medes, Cosimo II (1590-1621) Florentine ruler succeeded Ferdinand I and the Emperor Ferdinand III in war with Turks

Medes, Cosimo III (1642-1723) Florentine ruler succeeded Ferdinand II in 1670 made an unhappy marriage with Marguerite Louise d'Orleans a weak ruler who lived in luxury surrounded by court parasites made unsuccessful attempt to found Florentine republic

Medes, Francesco I (1418-87) Florentine ruler son of Cosimo whom he succeeded ruler tyrannical and quarrelled with Fr Venice and Genoa assassinated founded Uffizi Gallery and Delit (Russian academy)

Medes, Lorenzo, "the Magnificent" (1449-92) Florentine ruler son of Pietro alliance with Venice and Milan excited jealousy of Papacy and Sixtus IV excommunicated Florence ruler allied with Innocent VIII and his son, Giovanni made a capital patron of the arts and an accomplished man of letters 352, 353

Medeis, Marie de' (1573-1642) Queen Regent of Fr daughter of Francis of Tuscany married Henry IV (1600) mother of Louis XIII overthrown by Richelieu

Medes, Piero (the Younger) (1471-1503), Florentine ruler son of Lorenzo having surrendered Florence to Charles VIII of Fr was compelled to leave the city failing to regain it joined Ir at Naples and was drowned in the Garigliano

Mohammed Ali (Mohammed Ali) (1769-1849), Pasha of Egypt Alibumby by birth went to Ir to support Ali Karamly against Ir assumed government in defiance of Turkish Pasha treacher only invader Mamelukes conquered Arabs and Arabs and assisted sultan against Gks reformed Eg administration and introduced cotton growing

Maughan, Arthur (born 1874) Canadian statesman Sec of State (1917), Premier in succession to Sir Robert Borden (1920-21)

Mauk, Andrew (1710-1811) Scot inventor invented the first really successful threshing machine

Mausnier, Jean Louis Ernest (1815-91), Fr painter 45

Melancthon, Philip (1497-1560) Ger reformer appointed professor of Gk at Wittenberg thus becoming acquainted with Luther drew up Confession of Augsburg of which he sent a copy to the patriarch of Constantinople inviting his adhesion by his moderation as well as his writings did much to help Reformation (*Commonplaces of Theological Matters*)

Melba, Dame Nellie (Nellie Porter Mitchell) (born 1859) Aus prima donna took

- name of Melba from her birthplace Melbourne; voice somewhat cold but exceptionally pure coloratura soprano married Captain Charles Armstrong (1882) created Dame of Brit Empire (1918) played Lucia and Gilda in *Bohème* 8
- Melbourne, William Lamb, 2nd Viscount** (1779-1848) Brit statesman entered Parl as supporter of Fox (1805) (chief Sec for Ir under Canning (1827) and having succeeded to peerage Home Sec under Earl Grey (1830) Premier (1834-1835-41) famous for tactful guidance of youthful Queen Victoria
- Melchisedek** priest king of Salem (probably Jerusalem) mystically taken as a type of the Messiah
- Melville Andrew** (1845-1922) Scot reformer principal of Glasgow College and St Mary's College St Andrews deprived of posts owing to outspoken Presbyterian views and imprisoned in the Tower for five years did much towards organization of Scot Church
- Melville, Herman** (1813-91) Amer author after an adventurous life at sea began writing (1848) 'White-Jacket' which effected abolition of slavery in U.S. navy. *Typee* and *Momo* earliest and among the best tales of the South Seas
- Mendander** (34-201 B.C.) Gk comic poet principally representative of New Comedy portions of his plays discovered in 1911 in 20th cent. fragments in moral maxims
- Mendel, Gregor** (1822-84) Austrian biologist 1st of Brunn (1860) discovered Mendel's law of heredity
- Mendeleeff, Dmitri Ivanovitch** (1834-1907) Rus chemist formulated periodic law of the elements foretold by mathematical failure the discovery of three new elements, calcium, strontium and thallium
- Mendelssohn-Bartholdy, Felix** (1809-47) Ger musical composer 1821
- Mendelssohn, Moses** (1729-86) Ger Jew philosopher, grandfather of the musician original of Jesus, a Nathan the Wise
- Mendota, Catharine** (1841-1909) Fr poet novelist and dramatist member of the Parnassian movement versatile and brilliant writer (poems, novels and plays *La Reine la Reine la Reine*)
- Mendoza Diego Hurtado de** (1503-1572) Sp statesman and man of letters, governor of Sicily and ambassador at Rome under Charles V. published the first complete edition of his plays
- Mensikov II** (1844-1913) Emperor of Abyssinia ally and enlightened ruler forced European powers to recognize Abyssinian independence
- Mensshikov, Alexander Danilovitch** (1622-1729) Rus statesman served as aide de camp to Peter the Great won victory of Kuthuk (1706) over the Swedes helped to place Catherine I on the throne
- Mensshikov, Alexander Sargovich** (1787-1861) Rus general and diplomatist chiefly remembered as the Russian representative in the negotiations in regard to the Holy Places which led to the Crimean War
- Menzel, Adolf Erdmann** (1815-1905) Ger painter his subjects drawn from the period of Frederick the Great ('The Round Table of Frederick the Great' Frederick at the Battle of Hochkirchen)
- Mercantini, Luigi** (1821-72) It poet wrote the Garibaldi Hymn
- Mercator, Gerard** (1512-1594) Flemish geographer made globe for Charles V. to introduce system of projection with parallel meridians at right angles
- Mir Dardir Joseph** (born 1851) Belg Mariborough and pituit professor of (1860-1724) Aquinas Academy Rome II at the Archbishop of Milan and primate and cardinal (1906) made cardinal III, intrigues, got occupation of Belg. won the victory, pastoral letter (Christmas Oudenarde) and against the occupation on a charge of p.p. Belgians to remain many reforms in Ir allegiance to King
- Mariborough, Sarah J.** (1860-1944) married (1909) Eng poet induced Anne to de greatest Victorian and became all-powerful in obscurity by Mrs Abigail Hill
- Marlowe, Christopher** (1564
- of style classic fame literary adviser to the House of Chapman and Hall ('The Shaving of Shagpat' 'The Ordinal of Richard Fereval' 'The Knight poems Love in the Valley' 'Modern Love')
- Marmus, Prosper** (1803-70) Fr author elected to the Academy (1844) wrote *Le Theatre de Clara Gazul* etc a collection of pretended Illyrian songs and several collections of romances one of the great masters of prose in the 19th cent
- Marrville Charles** (1806-68) Eng historian and divine Chaplain to the Speaker (1863-60) and was appointed Dean of Ely ('Boyle Lectures' 'History of the Romans under the Empire')
- Marrville, Herman** (1806-74) brother of Charles Melville professor of political economy at Oxford Under Sec for the Colonies and afterwards for India ('Historical Studies')
- Marrick, Leonard** (born 1864) Eng novelist and playwright real name Leonard Miller (novels) Conrad in Quest of His Youth 'Cynthia' plays *My Innocent Joy* *The Flirt of Louis*
- Marriman, Henry Seton** (1862-1903) pen name of Hugh Stowell Scott Eng novelist ('The Sowers' 'Kodens Corner' 'In Kedar's Tents')
- Marry del Val, Raphael** (born 1865) B.C. prelate born in London of Sp parentage made papal ace of state and cardinal (1903) became ace of Congregation of the Holy Office (1914) ('The Truth of the Papal Claims')
- Maryon, Charles** Eng physician Lady Hester Stanhope's biographer 1881, 1882, 1883, 1884
- Mascher, Anton** (1793-1815) Ger physician regarded by some as a charlatan he paved the way for study of hypnosis by his discovery of Mesmerism
- Maschano, Pietro Bonaventura** (1698-1782) It poet and dramatist Court poet at Vienna for 60 years composed *Didi Abbandone* and many other lyric dramas
- Massey, John** (1717-1810) Eng engineer 1780
- Massey, Charles Theophilus, Baron** (1790-1846) Brit administrator entered East India Company, after fulfilling a difficult mission to Ranjpet Singh (1808) he became Governor General (1844) his act giving freedom to the press was resented by the Company and he returned next year to Eng
- Matschukoff, Ene** (1845-1916) Rus bacteriologist 1883
- Mattarnich, Clemens Wenzel Nepomuk Lothar Fürst von** (1773-1850) Austrian statesman after the restoration of the Bourbons he organized the Holy Alliance by which the old Neapolitan despotism was restored and the Sp constitution suppressed
- Mayerbeer, Jakob** (1791-1864) Ger musical composer chief among his works are *Robert le Diable* (1830) *Les Huguenots* (1836) *Le Prophète* (1840) and *Le Vaisseau de Ploernel* or *Demorah* (1850)
- Michael I** (died 844?) Emperor of the last succeeded Nicephorus I (811) defeated by Bulgarians and deposed (813)
- Michael III** (died 867) succeeded Theophilus (842) notorious for his evil living
- Michael IV** (the Paphlagonian) (died 1041) proclaimed emperor (1034), reconquered Bulgaria (1041)
- Michael V** (the Blaphetes) (died circa 1060) succeeded by his uncle Michael IV was afterwards dethroned
- Michael VIII** (died 1080?), son of Constantine XI interned his mother Eudokia the regent in a convent in 1071 abdicated (1078) becoming afterwards Archbishop of Ephesus
- Michael VIII** (Palaeologus) (1224-82) regained Constantinople from the Latins (1261) and subsequently defeated a 1r invasion
- Michelangelo, Buonarroti** (1475-1564) It sculptor, painter, architect, and poet, 1561
- Michalet, Jules** (1798-1874) Fr historian chief work 'History of France' (1833-60)
- Michewicz, Adam** (1798-1855), Polish poet, chief works, *Grajana*, 'Dunady', and *Wallenrod*
- Middleton, Conyers** (1683-1750), Eng scholar, author of *A Free Inquiry into Miraculous Powers*, (1749), and a *Life of Cicero*
- Middleton, Sir Hugh** (died 1631), Welsh contractor who constructed the New River, thus providing London with a water supply from Ware
- Middleton, John Henry** (born 1846) Eng writer on art Slade professor at Cambridge author of *Ancient Rome* (1885)
- Middleton, Thomas** (1570-1627), Eng dramatist, wrote several plays among which the chief were *A Mad World*, *My Masters*, *The Roaring Girl*, and *Women Beware Women*
- Middleton, Thomas Fanebaw** (1769-1822), 1st Eng Bishop of Calcutta
- Mieroslanski, Louis** (1814-78) Polish revolutionist prominent in the Polish risings of 1830 and 1844 later in Posen Sicily and Baden was made dictator of Poland (1863)
- Mignet, François Auguste Alexis** (1796-1884) Fr historian author of *A History of the French Revolution* (1824) *Mary Stuart* (1854)
- Mignon, or Minjon, Abraham** (1639-78), Ger painter, excelled in flower and fruit studies
- Milan Obrenovitch** (1854-1901) King of Serbia (1882-1889)
- Milano, Giovanni de** (born 1850) It painter, born at Milan his best paintings are the frescoes at Assisi
- Milnes, Sir Walter** (1822-89) Eng statesman Chancellor of the Exchequer for twenty-three years under Queen Elizabeth founded Emmanuel College, Cambridge
- Mill, James** (1778-1836) Scot economist father of John Stuart Mill chief works are *History of British India* (1815) and *Elements of Political Economy* (1821-22)
- Mill, John Stuart** (1806-73) Eng philosopher economist scholar and enthusiastic democrat 1867
- Millars, Sir John Everett** (1829-96) Eng painter one of the Pre Raphaelites, 1813, 1865
- Miller, Hugh** (1802-56) Scot geologist and author 1467
- Miller, Joaquin**, pen name of Clementius Heine (1841-1913), Amer poet his *Songs from the Sierras* was first published in London
- Miller, Patrick** (1731-1815) a pioneer of steam navigation 1844
- Miller, William** (1810-72) Scot poet born near Glasgow became a wood turner, wrote *Scottish Nursery Songs* and other Poems
- Millierand, Alexandre** (born 1850) Fr Premier later Pres (1920-24), Minister of War (1914-15)
- Millot, Jean François** (1814-75) Fr painter of peasant life 1835
- Millman, Henry Hart** (1791-1868) Eng churchman historian and poet his chief works are *History of Latin Christianity to the Pontificate of Nicholas V*, *A History of the Jews*, and *A History of Christianity*
- Milne, John** (1850-1913) Eng engineer and scientist, great authority on earth quakes
- Milner, Alfred, 1st Viscount** (1854-1925) Governor of the Transvaal after the 3 African War Colonial Sec (1910-21)
- Milnades** (5th cent B.C.) Athenian gen commanded at Marathon (490 B.C.), afterwards condemned for treason, and died in prison
- Milton, John** (1608-74), great Eng poet, 811
- Mimo de Fenele** (1400-86), It sculptor, among whose best productions were the marble pulpit in the cathedral of Prato, and the monument of Paul II in the Vatican
- Minto, Gilbert Elliot, 1st Earl of** (1751-1814) Brit statesman and lawyer, entered Parl (1774) became Viceroy of Canada (1794), while Governor General of India (1807-14) conquered the Isle of France and Java
- Minto, Gilbert John, 4th Earl of** (1844-1914),

held many high administrative offices, including that of Governor-General of Canada (1898-1904) and Viceroy of India (1906-10).

Mirabeau, Honoré, Gabriel Rigault, Comte de (1749-91), Fr. orator and statesman, at the opening of the Revolution he took a leading part in the proceedings of the Constituent Assembly his brother, the Vicomte ("Barrel Mirabeau"), was a reactionary Royalist and a violent opponent of the reforms which Gabriel strove to bring about.

Mitchell, Sir Thomas Livingstone (1792-1865), Brit. explorer of the interior of Australia.

Mitchell-Hedges, Frederick Albert (born 1882), Eng. explorer, carried out explorations in Central Amer. and deep-sea research in Caribbean Sea and Pacific Ocean, with Dr. Gann discovered wonderful Maya ruins.

Mitford, Mary Russell (1786-1855), Eng. novelist and dramatist, best known as the author of "Our Village".

Mitford, William (1744-1827), Eng. historian, author of "History of Greece" (1784-1810).

Mithridates (L'usator) (181-83 B.C.), King of Pontus, called the "Great", was sixth of the name, and succeeded his father (Euergetes) in 120 B.C. ordered a general massacre of the Romans after his capture of Bithynia and Phrygia was finally defeated by Pompey, and ordered a mercenary to kill him.

Modjeska, Helena (1844-1909), Polish actress, first attracted attention by her playing in *Adrienne Lecouvreur* at War saw (1868), afterwards achieved success in America and in London.

Moffat, Robert (1785-1883), Scot. missionary after working some time as a gardener was ordained in 1810, and went out to Africa where he was a missionary for twenty-three years, a colleague of Livingstone, 262.

Mohammed (570?-632), Arabian prophet, founder of Islam, 827.

Molé, Louis Mathieu, Comte de (1780-1835), Fr. statesman, Premier (1828-29).

Molesworth, Mary Louisa Stewart (1839-1921), Brit. novelist and writer of stories for children, including "Carrots" (1876) "Herr Baby" (1881) etc.

Molière (Jean Baptiste Poquelin) (1622-73), Fr. comic dramatist, 1187.

Molinos, Miguel (1640-97), Sp. theologian, leader of the Quietist movement, wrote "The Spiritual Guide".

Mollins, Nicholas, Comte (1758-1850) Fr. statesman, Minister of Finance (1806-15).

Moltke, Helmuth Karl, Count von (1800-91), Ger. strategist born in Mecklenburg, planned the campaigns which led to the overthrow of Pr. and the unification of Ger.

Mommsen, Theodor (1817-1903), Ger. historian, his chief works are his "History of Rome" and "Early Inhabitants of Italy".

Monica, Saint (332-387), mother of Saint Augustine.

Monk, George (1808-70), Eng. general, was Cromwell's lieutenant in Scot., but took the chief part in restoring Charles II, for which he received the dukedom of Albemarle.

Monmouth, James, Duke of (1649-85), Eng. pretender, natural son of Charles II, headed a rebellion, was defeated at Sedgemoor, and executed.

Monroe, James (1751-1831), 5th Pres. of the U.S.A., originator of the "Monroe doctrine".

Montagu, John Neville, Lord (died 1471), brother of Warwick, the "Kingmaker", won the battle of Hexham in 1464, but deserted the Yorkists in 1470, and was killed at Barnet (1471).

Montagu, Lady Mary Wortley (1689-1762), Eng. letter-writer, introduced inoculation into Eng.

Montaigne, Michel Eyquem de (1533-92), Fr. writer, his famous "Essays" were first published (1580).

Montcalm de Saint Veran, Louis Joseph, Marquis de (1712-59), Fr. general, defeated by Wolfe at Quebec (1759), and mortally wounded.

Montesquieu, Charles de Secondat, Baron de

(1689-1755), Fr. philosopher; his chief work was "L'Esprit des Loix" (1748). **Monteverde, Claudio** (1568-1643), It. composer, *Arvens* (1607) and *Orfeo* were his chief productions.

Montezuma I (died 1471), Aztec Emperor of Mexico, after having been the victorious general of his uncle, succeeded him (1486) he defeated the people of Chalchicomula, and embarked the lake of Texcoco.

Montezuma II (1466-1620), last Aztec Emperor of Mexico, became emperor (1520), conquered by Cortez, he was killed by his subjects, 1288, 1289, 1290. **Montfort, Simon de** (died 1218), Fr. soldier, leader of the crusade against the Albigenes (1208).

Montfort, Simon de (died 1265), Earl of Leicester, gained the practical control of the government after the battle of Lewes, but was defeated and slain at Evesham.

Montgolfier, Jacques Étienne (1745-99), and Joseph Michel (1740-1810), his brother, Fr. paper makers, inventors of the balloon (1783), 926, 926, 926.

Montgomery, Gabriel de (died 1574), Fr. soldier killed Henry II of Fr. in a tournament.

Montholon, Charles Tristan, Marquis de (1783-1858), Fr. soldier accompanied Napoleon to St. Helena to him Napoleon dictated notes on his career.

Montrose, James Graham, Marquis of (1612-50), Jacobite general, first joined the Covenanters, but afterwards became a zealous Royalist was defeated by Leslie at Philiphaugh in 1645, and four years later was executed.

Moody, Dwight Lyman (1837-99) Amer. preacher and revivalist, originally in business in Chicago made several preaching tours in Eng. with Ira D. Sankey.

Moore, Frank Frankfort (born 1855) Ir. novelist born at Limerick, author of "I Forbidden the Banns" (1893), "They Call It Love" (1895), etc.

Moore, Sir John (1761-1809), Brit. soldier son of a doctor at Glasgow won the victory of Corunna (1809), but fell in the battle.

Moore, Thomas (1779-1852), Ir. writer, son of a grocer at Dublin, chief among his works are "Lalla Rookh" (1817), "Irish Melodies", "Sacred Songs", etc.

Moray, James Stewart, Earl of (1580-70), Scot. statesman, natural son of James V. became regent on the deposition of his sister Mary Queen of Scots and ruled well, but was assassinated by James Hamilton.

More, Hannah (1745-1833), Eng. writer, her chief works, "Sacred Dramas" (1782), "Practical Piety" (1811), and several poems and successful plays.

More, Sir Thomas (1478-1535), Eng. statesman and writer, knighted (1522), became speaker (1523), and on the fall of Wolsey, Chancellor, committed to the Tower in 1534 for refusing to take the oath of supremacy, and executed on a charge of treason, "Utopia" is the most famous of his writings.

Moreau, Jean Victor (1763-1813), Fr. general, gained victories at Biberach and Hohenlinden (1800), and took Balthurg, was mortally wounded at Dresden.

Morgan, Sir Henry (died 1888), Welsh buccaner, ravaged the Sp. colonies and plundered Porto Bello (1669).

Morgan, John Pierpont (1837-1918), Amer. banker and financier, controlled United States Steel Co., several rlys., and other undertakings, was the most powerful and influential financier of his time.

Morier, Sir Robert Burnett (1826-93), Brit. diplomatist, minister-plenipotentiary to Port in 1876, to Sp. in 1881, to Russia in 1884, and to Rome in 1892.

Morland, George (1763-1804), Eng. painter, whose subjects were generally chosen from country life.

Morley, Henry (1822-94), Eng. man of letters, edited Cassell's "National Library," and wrote many popular Lives.

Morley of Blackburn, John Morley, Viscount (1838-1923), Eng. statesman and writer, edited, among other pub-

lications, the *Fortnightly Review* and the *Pall Mall Gazette*, entered Parl. (1883) Sec. for Ireland (1886 and 1892-95), Sec. for India (1900-10) Lord Pres. of the Council (1910-14), his works include "Edmund Burke," "Voltaire," "Rousseau," "Diderot," "On Compromise," and "Life of Gladstone". **Morley, Samuel** (1809-86), Brit. philanthropist, head of a great textile concern, his charity was munificent.

Mornay, Philippe de (1549-1623), Fr. statesman, popularly known as the Huguenot pope.

Morris, Francis Orpen (1810-93), Brit. naturalist, author of "History of British Birds," etc.

Morris, Gouverneur (1752-1816), Amer. statesman, was one of the drafters of the federal constitution (1787).

Morris, Sir Lewis (1833-1907), Welsh poet born in Carmarthen, his chief works are "The Epic of Hades" (1876-77), "Queen a Drama in Monologue" (1878), "The Ode of Life" (1880) the child of the Gothic revival his influence resulted in the beautifying of furniture wall-coverings, carpets, and other decorations of the home.

Morris, William (1834-96) Eng. poet and Socialist, his chief poems are "The Life and Death of Jason" (1867) and "The Lark in the Meadow" (1868-70).

Morrison, Arthur (born 1863), Eng. novelist, his work dealt largely with the low life of the East End of London ("Felix at Mean Streets," "A Child of the Jago," "The Dorrington-Dee Box").

Morrison, Robert (1782-1834) Brit. missionary, translated Bible into Chinese.

Morse, Samuel Finley Bressé (1791-1872) Amer. inventor of the electric telegraph, 1093, 2.

Mortier, Édouard Adolphe, Duke of Trévise (1788-1835), marshal of Fr. under Napoleon.

Mortimer, Roger, Earl of March (1287-1340), the favourite of Isabella wife of Edward II, whom he assisted to overthrow her royal husband, was hanged at Tyburn.

Morison, James Douglas, 4th Earl of (died 1581), Scot. statesman, executed as an alleged accomplice in the murder of Darnley.

Mosley, John Lothrop (1814-77), Amer. historian, U.S. ambassador to Gr. Brit. (1869-70) wrote "Rise of the Dutch Republic" (1866), etc.

Motte, Madame de la, 1st, adventures in Diamond Necklace affair 478.

Moulton, John Fletcher, 1st Baron (1844-1921), Brit. judge and scientist born at Madley, a judge of the Appeal Court before the World War his versatility was shown during the struggle in the production of high explosives.

Mount-Stephen, George Stephen, Baron (1829-1921), Anglo-Canadian financier, with Lord Strathcona completed the Canadian Pacific Rly. 187.

Mozart, Wolfgang Amadeus (1756-91), Austrian composer, 1089, 82.

Müller, George (1805-98), Brit. philanthropist, born near Halberstadt, came to Eng. in 1829, and founded the Bristol orphanage.

Mulock, Dinah (Crabbe) (1826-87), Eng. writer, daughter of a clergyman of Stoke-on-Trent, author of "John Halifax, Gentleman" (1854).

Mummus, Lucius, called Aschcius (2nd cent. B.C.) Roman consul, despoiled Corinth (146 B.C.).

Münchhausen, Karl Friedrich Jerome, Baron von (1790-97), Ger. soldier, his adventures were published in English (1785).

Munkácsy, Miksa (1844-1900), Hungarian painter, first apprenticed to a carpenter, among his best pictures are "Christ Before Pilate" (1882), "Christ on Calvary" (1884), and "The Last Moments of Mozart" (1886).

Munroe, Sir Thomas (1761-1827), Brit. soldier, governor of Madras (1819-27), successfully directed the Burmese war.

Murat, Joachim, King of Naples (1797-1815), Fr. soldier, son of an innkeeper, married Napoleon's sister, Marie Caroline, invaded Sp. (1808), made King of Naples for his services, defeated by

Austria he lost his kingdom was taken prisoner and shot
Murchison, Sir Roderick Impey (1792-1871) Scot geologist in 1839 published his *Silurian System*
Murdoch, William (1754-1839) Scot engineer and inventor 1809, 846 848
Murillo, Bartolomé Esteban (1617-82) Sp painter 717
Murray, David Christie (1847-1907) Eng novelist wrote *Joseph's Coat* *My the Gate of the Lea* *My the First Journey* etc
Murray, Landley (1745-1826) Amer writer published his *English Grammar* in England
Musaeus (5th cent.) Athenian poet the *Grammatician*
Musset, Alfred de (1810-57) Fr writer produced *Contes* *Le Piqueur* etc (1840) *Les Amis* (1833-37) and many stories
Musolini, Benito (born 1883) It statesman one of the founders of the Fascist movement to counter Bolshevism became Prime Minister (1922) received the Collar of the Annunziata (1923)
Mutsaers, Hito (1811-1911) Emperor of Japan ascended the throne (1867) abolished the feudal system and gave his country a parliamentary constitution
Muybridge, Edward (1830-1904) Eng Amer photographer pioneer of moving pictures invented the zoopraxiscope
Myron (5th cent. B.C.) Grk sculptor 1138, 1139
Myronides, Athenian general defeated the Corinthians at Maroneia (457 B.C.)
Mytens, Daniel (c. 1590-1645) Flemish portrait painter many of whose works are at Hampton Court

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Nabab (died 182 B.C.) tyrant of Sparta defeated by Philipomenus general of the Achaean League
Nashagel, Gustav (1834-85) Ger explorer made extensive explorations in the Western Sudan which he described in *Sahara und Soudan* (1879-89)
Nabab (died 903 B.C.) king of Israel succeeded Jeroboam (964 B.C.) killed by Baasha next to him
Nader Shah (Thomas-Kouli-Khan) (1688-1747) ruler of Persia invaded Afghanistan and Hindustan taking Delhi (1740) and was finally assassinated
Nawab, Ghasem (died 1800) Brit poet fragments of his epics on the first Punj war remain
Nazira Caroline Oliphant, Baroness (1766-1841) Scot auth, writer called *Herion* *Findo the Bird* and *The Lord o Cockburn* are her best known works
Nana Sahib (born 1821?) caused the murder of the garrison of Cawnpore on June 19 1857 defeated by Havelock and fled to Nepal
Nasek, or Nasuk (1469-1539) founder of the Sikhs (followers) native of the Punjab
Nassie, Guillaume de (13th cent.) Fr writer wrote a Latin chronicle
Nani, Giovanni Battista (1616-78) It writer and diplomatist was twenty five years Venetian ambassador at Paris
Nansen, Fridtjof (born 1861) Norwegian explorer in 1896 reached 86° 14' the farthest north reached up to that time
Nanteuil Robert (1630-78) Fr engraver of portraits regarded as one of the greatest of all time
Narayan, Dadabhai (1825-1917) Indian politician and mathematician entered House of Commons (1892) being the first native of India to attain that hon our he represented Central India
Napier, Sir Charles James (1726-1853) Brit general gained great distinction in India during the war against Sind
Napier, Sir Charles John (1786-1860) Brit admiral served in the Peninsula commanded the Channel Fleet (1840-48), and Baltic fleet (1854)
Napier, or Neper, John (1550-1617) Scot mathematician invented logarithms (1614)
Napier, Sir Joseph, Bart (1804-82) Irish judge, Lord Chancellor of Ire (1838)

Napier, Maevay (1776-1847) editor of the *Edinburgh Review* for eighteen years
Napier, Mark (died 1879) Scot writer author of *Memorials of John Napier of Merchiston* etc
Napier, Sir William (1785-1860) Brit historian his most famous book is *History of the Peninsular War* (1828-40)
Napier, William, Lord (1787-1834) Brit admiral served as a midshipman at Trafalgar superintendent of Brit in interests in China (1833)
Napier of Magdala, Robert, Baron (1810-90) Brit general rendered distinguished services in Indian warfare commander in chief in India (1870-76)
Napoleon I (1769-1821) Emperor of the Fr 708
Napoleon II (1811-32) King of Rome, son of Napoleon I by Marie Louise
Napoleon III (1808-73) Emperor of the Fr third son of Louis Bonaparte elected to the Assembly (1848) became Emperor of the Fr (1852) going to war with Prussia the result was his defeat and capture at Sedan (September 1 1870) after which he was deposed and lived in England till his death 1873 55
Napoleon, Prince Eugene Louis, Prince Imperial (1856-79) son of Napoleon III killed in the Zulu war
Naquet, Joseph Alfred (1834-1916) Fr politician became secretary to the committee of National Defence (1870)
Narbonne, Louis, Comte de (1756-1813) Fr soldier and statesman aide de camp to Napoleon I
Nardi, Jacopo (born 1476) It historian wrote a *History of Florence* and translated Livy
Nares, Sir George Strong (1831-1915) Brit Arctic explorer commanded the *Challenger* (1872-75)
Nares, Robert (1758-1829) Brit philologist author of *A Glossary of Words, Phrases, etc of Hebrew and Aramaic*
Nares (died 668?) Persian general served under Rom emperor Justinian defeated Totila the Goth (612) freed it from the Ostrogoths and ruled the country for fifteen years
Narves, Pamphila de (16th century) Sp general commanded expedition against Cortes (1520)
Narvaas, Ramon Maria (1800-1868) Sp statesman defeated the Carlists at Arton (1848)
Nash, John (1752-1855) Eng architect designed Buckingham Palace besides streets and buildings in the West End of London
Nash, Richard (1674-1762) Beau Nash leader of fashion at Bath where he was master of the ceremonies for fifty years
Nasmyth, Alexander (1717-1840) Scot artist founder of the Scot school of landscape painting
Nasmyth, James (1808-90) Scot engineer invented the steam hammer
Nasmyth, Patrick or Peter (1787-1831) Scot artist examples of his landscapes are in the National Gallery
Nast, Thomas (1840-1902) Amer caricaturist born in London
Nastour, Sir Robert (died 1633) Eng statesman and diplomatist Sec of State (1618)
Nash, Daniel (1678-1748) Eng divine author of *History of the Puritans* and *History of New England*
Nasander, Johann August Wilhelm (David Mendel) (1789-1850) Ger theologian of Jewish parentage author of *History of the Christian Religion and Church*
Nearchus (4th century B.C.) Cretan naval commander under Alexander the Great
Necker, Jacques (1732-1804) Fr statesman of Genevese birth comptroller general (1777-81) made vain attempts at financial reform
Needham, Marchmont (1620-78) Eng political writer
Neefs, Peter (1670-1651) Flemish painter his subjects are mainly architectural
Neer, Aart (born 1619?) Dutch painter chiefly of marine subjects several of his works are in the National Gallery
Nell, James George (1810-57) Eng general in the Indian Mutiny took and held Allahabad and avenged the massacre of Cawnpore

Nelson, Lillian Adelaide (1850-80) Brit actress distinguished for her rendering of Shakespearean characters
Nelson, Horatio, Viscount (1758-1805), Brit admiral 1045
Nemours, Louis Philippe d'Orleans, Duc de (1814-98) second son of King Louis Philippe left Fr in 1848 returned in 1870
Nennius, Welsh historian reputed author of *Historia Britonum* a chronicle extending from Brut the Trojan to 680
Nepos, Cornelius (died circa 24) Latin writer friend of Cicero
Nero, Lucius Domitius (37-68) Emperor of Rome persecuted the Christians
Nestor (died 1118) Rus monk left a chronicle which is the earliest work on Rus history
Nestorius (died 450?) founded the sect of the Nestorians
Netscher, Kaspar (1639-84) Ger printer excelled in depicting costume his sons, Theodore (died 1732) and Constantine (died 1722) were portrait painters
Natlanshaw, Henry (1839-93) Eng scholar his chief work is *Lectures and Essays on Subjects Connected with Latin Literature and Scholarship* (1885)
Neuhoff, Baron Theodore von (died 1766) Ger adventurer crowned king of Corsica (1735) but being unable to achieve its independence came to Eng where he was imprisoned for debt for some years
Neumann, Karl Friedrich (1798-1870) Ger Orientalist wrote several historical works dealing with China
Neville, George (died 1478) Eng prelate brother of Warwick the kingmaker was made Bishop of Exeter when under act and became Lord Chancellor (1469)
Newcastle, William Cavendish, 1st Duke (1692-1676) served the Royalist cause during the Great Rebellion
Newcastle, Henry Pelham-Clinton, 5th Duke of (1811-64) Brit statesman, entered parliament (as Lord Lincoln) (1832) Sec for War and the Colonies (1852-54) Sec for the Colonies (1859-64)
Newcastle-under-Lyme, Thomas Pelham, Duke of (1694-1783) Brit statesman Prime Minister (1754-56 and 1757-62)
Newcomen, Thomas (1663-1729) Eng inventor 1345
Newdigate, Sir Roger (1719-1806) Eng antiquary founded the prize for an Eng poem which is annually awarded
Newman, Edward (1801-78) Brit naturalist author of *History of British Ferns* (1845) and *History of British Moths* (1860)
Newman, Francis William (1805-97) Brit author brother of Cardinal Newman his chief works are *The Soul its Sorrows and Aspirations* (1849) *Phases of Faith* (1870) and *Theism, Doctrinal and Practical* (1858)
Newman, John Henry, Cardinal (1801-90) Brit theologian and cardinal took orders (1824) became vicar of St Mary's, Oxford (1828) received into the Rom Church (1845) founded the Brompton oratory (1850) created cardinal (1879) his best known work is *Apologia pro Vita Sua*
Newnes, Sir George (1851-1910) Eng journalist and publisher born at Matlock Bath founded a number of popular periodicals and magazines and built up a large publishing house
Newton, Alfred (1829-1907) Brit zoologist author of *The Zoology of Ancient Europe*
Newton, Gilbert Stuart (1784-1835) painter his *York and the Grange* is in the National Gallery
Newton, Sir Isaac (1642-1727), Eng natural philosopher 787
Newton, John (1725-1807) Eng divine friend of Cowper with whom he produced *Olney Hymns*
Newton, Thomas (1704-82) Eng divine, became Bishop of Bristol (1761) and Dean of St Paul's (1768)
Ney, Michel (1769-1815) marshal of Fr in the retreat from Moscow commanded the rearguard of the Grande Armee, led the charge of the Old Guard at Waterloo after which he was shot as a traitor
Niccolini, Giovanni Battista (1781-1861),

It poet librarian and sec to the Florentine Academy of Fine Arts

Nicéphorus (750-820) Byzantine historian wrote history of Constantinople

Nicéphorus I (died 811) & Rom emperor (802-11) made a treaty with Charlemagne (808) he governed with great cruelty was surprised and slain in his camp by the Bulgarians

Nicéphorus II (912-69) & Rom emperor (963-69) recovered Cilicia Syria and Cyprus from the Saracens (963-69) murdered by John Zimisce

Nicéphorus III (1078-91) E Rom emperor succeeded Michael VII defeated Bryennius but was deposed and became a monk

Nicéron, Jean Pierre (1655-1738) Fr writer author of *Mémoires pour servir à l'Histoire des Hommes Illustres de la République des Lettres* (forty four volumes)

Niebol, John Pringle (1804-59) Scot clergyman and astronomer author of *Views of the Architecture of the Heavens*

Nicholas I (1795-1855) Tsar of Rus succeeded Alexander I (1825) crushed the rising of the Poles (1830) died during the Crimean war

Nicholas II (1868-1918) Tsar of Rus (1894-1917) following the European war was forced to abdicate and in 1918 was assassinated together with his family by Bolsheviks

Nicholas I (1841-1921) King of Montenegro succeeded his uncle in 1860 and it was not until 1916 that he lost his throne

Nicholas I (died 867) Pope (858-87) in many conflicts with the chief bishops of the West did much to establish the papal supremacy

Nicholas II (died 1061), Pope elected in 1058

Nicholas III (died 1280) Pope elected in 1277

Nicholas IV (died 1292) Pope elected (1288) active in the adornment of Rome

Nicholas V (1398-1455) Pope elected (1447) the abdication of the pope two years later brought to an end the Great Schism an eminent scholar and chief founder of the Vatican library

Nichols, John (1745-1826) Eng printer and editor associated with the *Gentleman's Magazine* (1778-1826) and published *Literary Anecdotes of the Eighteenth Century* (1812-15)

Nichols, John Gough (1806-75) Eng antiquary edited the *Gentleman's Magazine* (1851-56)

Nicholson, John (1831-57) Brit soldier during the Indian Mutiny disarmed the rebels at Peshawar was mortally wounded at the siege of Delhi 206

Niel, Erling (1825-1904) Scot artist lived much in Ire scenes from which country form most of his subjects

Nielsen, Otto (1810-49) Ger composer his most famous opera is *The Merry Wives of Windsor*

Nielson, Sir Nicholas Harris (1799-1848) Eng antiquary author of *History of the Orders of Knighthood*

Niell, Sir William Robertson (1831-1923) Scot journalist and author born in Aberdeenshire founded the *British Weekly* (1886) and edited it for many years author of *A Bookman's Letters* (1913) etc

Nesit, Jean (1580-1600) Ir diplomat when ambassador to Port brought back the tobacco plant (1569) which was called herbs moctians after him

Nesbitt, Charles (1783-1815) Ger traveller geographer to Danish expedition to Arabia (1761-62) publishing an account of it in *Description of Arabia and Travels in Arabia*

Nesbitt, Barthold Georg (1776-1831) Ger historian and philologist author of a *Roman history* an epoch making work in this branch of literature

Nesl, Adolph (1802-69) marshal of Ir directed the siege of Sebastopol (1854-55) Minister of War (1867-69)

Nesmeussen, Johan Urban (1757-1841) Fobish statesman and writer his chief work is *Historical Ballads*

Nessee de Saint-Victor, Claude Félix Abel (1805-70) Fr inventor of photography on glass

Nestakows, Friedrich (1844-1900) Ger philosopher author of *The Genealogy of Morals* (1887) etc

Nightingale, Florence (1820-1910) Brit war nurse 223

Nilsson, Christine (1843-1921) Swedish singer daughter of a farmer made her first appearance at Paris (1864) in *La Princesse* visited Eng (1867) retired (1888)

Nimrod (1778-1843) pen name of Charles Apperley Brit author of *Hunting Tours* (1835) *The Turf the Chase and the Road* (1837) etc

Nihrsdale, William Maxwell 5th Earl of (1876-1744) Scot Jacobite leader celebrated for his escape effected by his wife from the Tower (1716)

Nisami al Muluk (died 1092) Grand Visier of Persia for nearly thirty years founded and endowed the college of Bagdad killed by an assassin

Nisami, Nisami-uddin Abu Mohammed (12th century) Persian poet his principal work is *Khamseh*

Nisslitz, Adrien Maurice, Duc de (1678-1768) Ir marshal commanded at Dettingen (1743)

Nobel, Alfred Bernhard (1833-96) Swed chemist inventor of dynamite founder of Nobel prizes

Noble, Mark (1784-1827) Brit divine and antiquary author of *History of the College of Arms* etc

Nodder, Charles (1780-1844) Fr writer among his best works are *Le Roi de Bohême* and *Inc de las Sierra*

Noel, Baptist Wrothelake (1738-1878) Brit divine left the Church of Eng soon after the Gorham decision (1848) and joined the Baptists

Nolan, Captain Lewis Edward (1817-54) Brit soldier killed at Balaklava (1854)

Nollkens, Joseph (1737-1823) Eng sculptor son of a Dutch landscape painter his bust of Goldsmith is in Westminster Abbey

Noord, Gerard (1647-1735) Dutch jurist rector and professor of law of Leyden

Nordberg, Georg (1677-1744) Swedish historian accompanied Charles XII in his campaigns as chaplain wrote a *Life of Charles XII*

Nordenflied, Nils Adolf Erik, Baron (1832-1901) Finnish explorer made expeditions to Spitzbergen (1881 and 1884) accomplished N.E. passage (1878-80) wrote *The Voyage of the Vega Round Asia and Europe* (1881)

Nordens, Lohan Norton (1859-1914) Am r operative singer acquired reputation by her rendering of *Marguerite in Faust*

Norfolk, Thomas Howard, 3rd Duke of (1473-1554) Eng soldier rendered great services to Henry VIII as a soldier in Fr and Scot suppressed the Pilgrimage of Grace (1537-38)

Normanby, Constantine Phipps, Marquis of (1797-1863) Brit statesman Colonial Sec (1839) Home Sec (1839-40) ambassador at Paris (1840-54) am bassador at Florence (1854-58)

Norris, Sir John (died 1740) Brit admiral served under Rooke Russell and Sir Cloudesley Shovel

North, Frederick, Lord (1732-1792) Brit statesman Prime Minister (1770-82) became 2nd Earl of Guildford (1790)

Northbrook, Francis Baring, Lord (1795-1868) Brit statesman Chancellor of the Exchequer (1839-41) 1st Lord of the Admiralty (1849-53)

Northbrook, Thomas George Baring, 1st Earl of (1826-1904) Gov Gen of India (1872-78)

Northcliffe, Alfred Charles William Harcourt, Viscount (1867-1922) Brit journalist and newspaper proprietor 1443

Northcote, James (1746-1831) Eng artist, son of a Plymouth watchmaker one of his best pictures is *The Young Princess Murdered in the Tower*

Northumberland, Henry Percy, Earl of (died 1408) Eng soldier distinguished himself in the wars of Edward III received his title from Richard II

Norton, Charles Bowyer Adderley, 1st Baron (1814-1905) Brit statesman represented North Staffordshire as a Con-

servative (1841-78) Pres of the Board of Trade (1874-78) created a peer (1878)

Nett, Joseph Clark (1804-1878) Amer ethnologist and physician

Nett, Sir William (1783-1845) Brit general defended Kandahar (1842) routed the Afghans at Ghazni (1842) resided at Lucknow (1842-43)

Nevala (1772-1801) pen name of Friedrich von Hardenburg, Ger poet and philosopher

Neonian (3rd cent.) Rom presbyter founder of the Novatian sect

Novello, Vincent (1781-1861) Brit musical composer and publisher

Nubar Pasha (1825-99) Ig statesman Minister of Public Works (1864) of Foreign Affairs (1867) Prime Minister (1884-88)

Numerianus, Marcus Aurelius (died 284) Rom emperor reigned eight months with Carinus

Nuniz de Arce, Gaspar (1834-1903) Sp poet called the Fannyson of Spain

O

Oates, Lawrence Edward Grace (1880-1912) Brit soldier and polar explorer 16

Oates, Trina (1860-1903) Eng conspirator in 1877 became a Rom Cath but after words recanted and pretended he hid discovered a popish plot in consequence of his representations Lord Stafford and others were executed

Oberlin, Jeremias Jakob (1713-1806) Alsatian philologist edited editions of *Caesar* *Horace* *Ovid* and *Tacitus*

Oberlin, Johann Friedrich (1740-1836) brother of the preceding Lutheran pastor of the *San de la Roche* his agricultural schemes were especially successful

O'Brien, William (born 1852) Ir Nation alist and journalist entered Parl (1883)

O'Brien, William Smith (1803-64) Ir politician formed the Young Ireland party in 1847 founded the *Confederation*

Oceanus, William of (died circa 1540) Jn schoolman wrote *Disputatio super Potestate Ecclesiastica* and *Summa Totius Logice*

Ochino, Bernardino (1487-1564) It re former published *Iudich* etc

Ochterlony, Sir David (1768-1853) Brit gen ral defended Delhi against Holkar (1804)

Ockley, Simon (1678-1720) Eng divine and Orientalist his chief work is a *History of the Saracens* (1718)

O'Connell, Daniel (1775-1847) Ir politician his agitation for removing the political disabilities of the Rom (which culminated in 1829 when the Catholic Emancipation Bill was passed)

O'Connor, Feargus Edward (1796-1853) Christ leader entered Parl (1832) edited the *Northern Star*

O'Connor, Thomas Power (born 1848) Ir Nationalist and journalist born at Athlone entered Parl in 1890 a prolific writer in newspapers and periodicals

Octavia (died 11 B.C.) daughter of Caius Octavius and sister of Augustus

O'Curry, Eugene (1796-1862) Ir antiquary published works on *The Manners and Customs of the Ancient Irish*

Odenathus (died 267) King of Palmyra expelled Sapor King of Persia from Syria and proclaimed himself king, afterwards invaded Persia and captured Ctesiphon

Odener, Joseph Denis (1798-1830) Be's painter among his chief works are *The Peace of Utrecht* and *The Battle of Nieuport*

Ode, Saint (879-943) Abbot of Clugny his system of monastic discipline was adopted generally on the Continent

Odo, Saint (born 958) was appointed Arch bishop of Canterbury by Edmund in 944

Odo de Conteville (1032-87) half brother of William I after the conquest was granted the earldom of Kent

Odoacer (died 493) King of the Heruli ruled it as patman under the Eastern Emperor, Zeno overthrown and

executed by Theodoric King of the Ostrogoths

O'Donnell, Leopoldo, Duke of Tetuan (1809-87) Sp soldier and politician of Ir descent Union Liberal Premier (1858)

O'Donovan, John (1809-61) Ir scholar wrote much and valuably on Ir history and Ir historical topography

Oelampedes, Johannes (148-1531) Ger reformer real name Hussen (Haus) (whin) took a leading part in establishing the Reformation in Switzer land

Oehlenschläger, Adam Gottlob (1779-1850) Danish poet among his works are the dramatic poem Aladdin and Hakon Jarl Palmatokr and other tragedies

Ohmsted, Hans Christian (177-1851) Dan man of science his great discovery was the power of an electric current upon a magnet from which the science of electro magnetism has been developed

Offenbach, Jacques (1819-80) Ger comp posr born of J wish parents it (c) (c) composed many operas including *Orpheus in the Underworld* (1858) *Maitre l'Amant* etc

Ogilby John (1600-76) Scot self educated writer translated Virgil into English and Homer

Oglethorpe, James Edward (1696-1785) Eng general in 1733 founded the colony of Georgia Amer which he named after George II

Ohm, George Simon (1787-1854) Ger physicist discovered Ohm's law of electricity

Ohmachi, Landelin (1761-1834) Ger sculptor in judgment of Paris at Munich is a fine specimen of his art

Ohnet, Georges (1848-1918) Fr novelist born in Paris author of *Scrupule* (1881) *Le Maître de forges* (1884) etc

Ojeda, Alonso de (born circa 1460) Sp navigator companion of Columbus in his second voyage (1493) discovered Venezuela

O'Keefe, John (1747-1833) Ir writer and poet wrote *JA* *Agreeable* *Supper* *Wife* *Out* and other plays

Oken on Okenhous Lorenz (1779-1851) Ger naturalist in 1800 published his 'Sketch of a system of Natural Philosophy' containing the germ of his theory of growth by a repetition of cells

Olaf I, Trygvasson (died 1000) King of Norway joined Swedish king of Denmark in his invasion of Eng (J) came to terms with thelred and was baptized by the Archbishop of Canterbury

Olaf II (died 1070) King of Norway the saint patron saint of Norway became king in 1015 during his reign suppressed the Vikings and established Christianity in Norway

Olaveres, Pablo Antonio José (1725-1803) Count of Biloa planted and colonized the burgomaster of Sierra Morena

Olbers, Heinrich Wilhelm Matthias (1758-1840) Ger astronomer discovered the planets *Uranus* (1801) and *Vesta* (1807) and in 1812 the comet which bears his name

Oldcastle, Sir John, Lord Cobham, King's knight a leader of the Lollards in 1417 captured and hanged original of Shakespeare's *Richard III*

Oldham, John (1631-83) Eng satirical poet wrote four satires upon the Jesuits and Panduric Odes and translated Juvenal

Oldmixon, John (1673-1742) Eng historian he entered in the Duncannon

Oldys, William (1698-1761) Eng antiquary our best bibliographer wrote the *British Library*

Oliver, Sir William a late of Sir Walter Scott's friend

Oliver, Sir Charles the Russian dominions

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The Minister's Wife (1880) The Wizard's Son (1884) etc

Oliveres, Gaspar de Guzman, Count of (1587-1645) Sp statesman as chief minister of Philip IV practically ruled Sp for over 20 years

Oliver Isaac (1566-1617) Eng artist his portraits include miniatures of Sir Philip Sidney Sir Kenelm Digby etc

Oliverius, Petrus Robert (died 1588), Fr reformer born at Noyon related to (alvin) one of the principal authors of the first Fr translation of the Bible

Oliver, Guillaume Antoine (1756-1814) Fr traveller wrote *Voyage dans l'Empire Ottoman* etc

Oliver, Oliver Emile (1825-1913) Fr politician was Premier under Napoleon III when Fr went to war with Prus (1870)

Olthausen, Hermann (1796-1880) Ger Prof divine wrote a *Commentary on the New Testament*

Olybrius (died 472) Rom Emperor of the West

Olympas (died 316 B.C.) daughter of Neo ptolemus King of Egypt mother of Alexander the Great

Omar (581-644) the second Caliph one of Mahomet's earliest followers succeeded Abu Bakr in 634 during his caliphate the Saracen empire was extended over Syria Palestine Persia and Egypt

Omar Khayyam (died 1123) Persian poet and astronomer (poem translated by Edward Fitzgerald)

Omar Paasha (1806-71) Turkish soldier was by birth an Armenian his real name being Michael Latas expelled the Russians from the Danubian principities (1854) and defeated them at Pultarna in the Crimea (1856)

O'Meara, Barry Edward (1788-1886), Ir physician resided with Napoleon at St Helena as his physician until 1818 in 1822 he published *A Voice from St Helena* or *Napoleon in Exile*

Omayy (Muawiyah) (died 880) Caliph of Damascus was founder of the Omayyad dynasty of caliphs

Opa, John (1781-1807) Eng painter son of a carpenter at Truro became a fashionable portrait painter his works include portraits of Johnson Lady Hamilton and Fox

Opa, Martin (1587-1639) Ger poet, in 1625 he was crowned poet laureate by the Emperor Ferdinand II

Oppenheim, Edward Phillips (born 1844) Eng author of dramatic and sensational novels *The Mysterious Mr. Babin* *The Mischief Maker* *The Double Traitor* *The Great Impersonation* etc

Opyan (died circa 200) Gk poet born in Cilicia wrote *Halientica* a poem on fishing

Orange, House of, princely family who were sovereigns of Orange (S L R) William I the silent (1584-84) son of William Count of Nassau founded the republic of the Netherlands (1679) of which he was elected the first stadtholder he was assassinated at Delft Maurice of Nassau (1607-1625) 2nd son of the preceding was one of the most skilful strategists of the age and enabled the Dutch to maintain their independence Frederick Henry of Nassau (1614-1647) brother of the preceding whom he succeeded in 1625 he carried on the war against Sp with success William II (1626-50) son of the preceding whom he succeeded in 1649 married Mary daughter of Charles I of Eng William III see William III of Eng John William Friso (1687-1711) became Prince of Orange on the death of William III in 1702 distinguished himself against the Fr William Charles Henry (1711-61) posthumous son of the preceding, was elected stadtholder in 1747

Oragna (Andrea di Gena) (1308-75) Florentine architect sculptor, and painter among his best paintings is the *Last Judgment* in the church of Santa Maria Novella Florence

Orbachow, Sir William Quiller (1835-1910) Brit painter exhibited Queen of the Swords (1877), *Voltaire* at

the Duc de Sully's (1883) *Marriage de Conscience* (1886) etc

Orszag, Eszterhazy, Baroness, Brit novelist and playwright of Hungarian birth among her best known works are *The Scarlet Pimpernel* *The Liqueur Pimpernel* and *I will Repay*

Ordericus Vitalis (1075-1143) long chronicler born near Shrewsbury his *Historia Ecclesiastica* includes a valuable history of his own times

Orellana, Francisco (died 1550) Sp traveller in 1540 followed the river Marañon to its mouth and named it the Amazon

Orelli, Johann Kaspar von (1787-1849), Swiss classical scholar his chief works are his editions of Horace (1837-38) Tacitus (1846-48) and Cicero (1826-38)

Orestes (died 476) Pannonian general in 476 after he had deposed Julius Nepos he set up his son Romulus Augustulus as emperor Odoacer put him to death

Orelli, Mathias (1787-1853) Sp physician and chemist born in Minorca he wrote a *Treatise on Poisons* (1813)

Origen (185-254) Christian father born at Alexandria ordained presbyter at Caesarea in 238 fled to Cappadocia to avoid persecution (253) was imprisoned and tortured and died at Tyre

Orléans, Duke of, title borne by three lines of Fr princes the first line included the following Louis (1472-1497) 2nd son of Charles V of Fr Charles VI having lost his reason two parties arose headed respectively by Louis and John Duke of Burgundy Louis was murdered by his rival Charles (1391-1465) son of Louis a poet—he was taken prisoner at Agincourt (1415) Louis XII the chief member of the second line was Gaston Jean Baptiste (1608-60) younger son of Henry IV and brother of Louis XIII the third line included Philippe (1640-1701) 2nd son of Louis XIII of Fr Philippe (1674-1728) son of the preceding became regent on the death of Louis XIV (1715) his son, Louis (1703-53) who retired to the abbey of St Genevieve Louis Philippe (1726-85) son of the preceding Louis Philippe Joseph (1747-93) son of the preceding adopted democratic views and after the Revolution voted for the death of the king in 1793 he was guillotined his son Louis Philippe became king of the Fr

Orléans, Ferdinand Philippe Louis, Duke of (1810-42) eldest son of Louis Philippe distinguished himself at the siege of Antwerp and also in Algeria left two sons the Comte de Paris and the Duc de Chartres

Orléans, Louis Philippe Robert, Duke of (born 1864) eldest son of the Comte de Paris the legitimate claimant to the throne of Fr

Orloff, Gregory (1734-88) Rus courtier favourite of Catherine II of Rus planned the revolution against Peter III, which placed her on the throne (1762) his brother Alexis (1766-1808) was the murderer of Peter III Alexis Fedorovich (1787-1881) nephew of Gregory and Alexis represented Rus at the Congress of Paris

Orme, Robert (1728-1801) Indian administrator and historian author of a *History of the Military Transactions of the British Nation in India*

Ormonde, James Butler, Duke of (1610-88) Eng peer and Yorkist soldier, followed Charles II in his exile was Lord Lieut of Ireland (1643-47 and 1661-68)

Orobis, Balhazar (died 1687), Sp Jew, professor of metaphysics at Salamanca, wrote *Certamen Philosophicum*

Orosius, Paulus (5th cent.) Sp ecclesiastic was a disciple of St Augustine

Orpen, Sir William (born 1878) Brit painter born at Dublin one of the greatest modern portrait painters elected R.A. (1919) frequent exhibitor at the Royal Academy his *Le Chef de l'Hôtel* (hathane Paris (1921) and *The Lord* (huf Justice of Ireland (1925) being notable exhibits

Orsini, Felice (1813-58), Ir revolutionist, in January 1858 he attempted to assassinate Napoleon III by throwing

7) Eng nov is books are

bombs under his carriage, for which he was executed

Ortelius, Abraham (1527-98) Belg geographer geographer to Philip II of Sp

Orison, Job (1717-83) Eng Nonconformist divine wrote "Memoirs of Dr Doddridge" etc

Osborn, Sheward (1822-76), Brit admiral wrote several books of travel

Osborne, Lord Sydney Godolphin (1808-89), Eng philanthropist was rector of Dorchester, Dorset (1841-76), made great efforts to improve the condition of the agricultural poor

Oscar I (1799-1859), King of Sweden, succeeded his father, Charles XIV, in 1844

Oscar II (1829-1907), King of Sweden, succeeded his brother, Charles XV, in 1872, near the end of his reign Norway separated from Sweden (1905)

Oslander, Andreas (1498-1552), Ger reformer became professor of theology at Konigsberg (1548)

Osmun or Othman (1258-1326), founder of the Ottoman dynasty, took Nioca (1304), and founded a kingdom consisting of Bithynia, Phrygia and the neighbouring regions

Osmann, Ali (1836-1900), called "Osman Digna", commanded the insurgents in the rebellion excited by the Mahdi, which began in 1881, defeated and killed (1900)

Osmann Nubar Pasha (1832-1900), Turkish soldier, distinguished himself by his defence of Plevna against the Rus (1877)

Osmund, Saint (died 1099) Norman ecclesiastic, accompanied William I to Eng became Bishop of Salisbury, the cathedral of which was completed under his direction

Osmington, John Evelyn Dunsen, Viscount (1800-79), Brit politician entered Parl in 1823 was Speaker (1857-72), raised to the peerage (1872)

Ossoli, Sarah Margaret Fuller, Marchioness (1810-50), Amer authoress wrote "Women in the Nineteenth Century," etc

Ossory, Thomas Butler, Earl of (1643-80) Brit sailor son of the 1st Duke of Ormond distinguished himself at sea against the Dutch

Ostade, Adrian (1610-85) Dutch painter pupil of Hals and Rembrandt his paintings include "The Fish Market" and "A Smoker Lighting His Pipe" and his brother, Isaac (1621-46), belonged to the same school

Oswald, Saint (605-42), King of Northumbria, defeated Cadwallon, king of Wales slain in battle by Penda, King of Mercia

Otto (1815-67), son of Ludwig II, King of Bavaria was chosen King of Greece in 1835, in 1862 he was forced to retire to Bavaria

Otto, Marcus Salivus (32-69), Rom of palatinate (ascend) proclaimed emperor by the Praetorian Guards but was defeated by Vitellius at Bebracum, and committed suicide

Ottley, William Young (1772-1836) Eng artist, wrote "The Italian School of Design," etc

Otto I (912-73), Holy Rom Emperor called "the Great" son of Henry the Fowler was chosen king of Ger in 936 in 962, after routing the Hungarians, was crowned emperor at Rome extended his dominion over nearly the whole of It. and re-established the Western Empire

Otto II (955-58), Holy Rom Emperor, succeeded his father, Otto I, after defeating his rival, Henry of Bavaria was himself defeated by a combined army of Greeks and Saracens (962)

Otto III (980-1002), Holy Rom Emperor son of the preceding was crowned at Rome in 996

Otto IV (1174-1218), Holy Rom Emperor, son of Henry the Lion Duke of Saxony, was crowned at Rome (1209) but in 1212 Frederick II was chosen in his stead

Ottobear II (died 1278) King of Bohemia by his marriage with Margaret, sister of Frederick II (1252), obtained Austria and Styria, but was forced to cede these territories to Rudolph of Hapsburg

Ottway, Thomas (1652-85), Eng dramatist his finest tragedies are *The Orphans* (1680) and *Penic Proserpine* (1682)

Oudinot, Charles Nicholas, Duke of Reggio (1767-1847) marshal of Fr gained the battle of Ostrolenka his son, Charles Nicholas Oudinot Duke of Reggio (1791-1863) commanded the Fr army sent in 1849 to Rome to restore Pius IX

Oughtred, William (1673-1660) Eng divine and mathematician educated at Cambridge, wrote "Clavis Mathematica," etc

Ouida, the pseudonym of Louise de la Ramee (1840-1908), Eng novelist of Fr extraction, among her works are "Held in Bondage" (1863), "Strathmore" (1865) "Under Two Flags" (1867), and "Moths" (1880)

Outlaw, Walter William (born 1848), Eng portrait painter born in Jersey, became R.A. (1881) among those who sat to him were Charles Darwin, John Bright (1879), and Cardinal Newman (1880)

Outsley, Sir Frederick Arthur Gore, Bart. (1825-89), Eng composer, professor of music at Oxford (1855)

Outram, Sir James (1803-63) Brit gen served many years in Indr took part with Havelock in the relief of Lucknow

Overall, John (1569-1632) Eng divine became Bishop of Lichfield in 1614, and of Norwich in 1619 wrote the sacramental part of the Church Catechism

Overbeck, Johann Friedrich (1780-1869), Ger religious artist his chief works are "Christ a Agony in the Garden" (1835), at Hamburg and "The Vision of St Francis" (1840) at Aquis

Overbury, Sir Thomas (1581-1613), Eng courtier and writer thrown into the Tower, where he died of poison Overbury's chief work is his "Characters," also wrote "The Remedy of Love"

Overstone, Samuel Jones Loyd, Baron (1798-1883), Welsh banker the Bank Act of 1844 was based upon his proposals

Overweg, Adolph (1822-52), Ger traveller accompanied the expedition of Richardson and Barth to Lake Thed (1850)

Ovid (Publius Ovidius Naso) (43 B.C.-A.D. 17), Rom poet patronized by Augustus died in exile, among his chief poems are "The Amores," "Ars Amatoria," "Fasti," and "Metamorphoses"

Oviedo y Valdez, Gonzalo Fernandez de (1478-1557), Sp historian his chief work is a "General and Natural History of the West Indies" in fifty books

Owen, Henry (1716-95), Welsh clergyman, became vicar of Edmington in 1775, wrote "Observations on the Four Gospels," "Critica Sacra, or, an Introduction to Hebrew Criticism," etc

Owen, John (1816-63), Eng Nonconformist divine preached before the House of Commons on the day after Charles I's execution accompanied Cromwell to Ir and Scot his writings are voluminous

Owen, Sir Richard (1804-92), Eng anatomist and palaeontologist, born at Lancaster, in 1856 he was appointed superintendent of the natural history department of the British Museum, his discoveries are summarized in his "Palaeontology" (1961)

Owen, Robert (1771-1858), Welsh philanthropist the founder of socialism in Eng, to his efforts may be traced the first factory legislation, the co operative movement, and the establishment of infant schools

Oxenford, John (1812-77), Eng author and critic, wrote "The Dine of Death" and other plays

Owenham, John, pen-name of the Eng author and poet W.A. Dunkerley, his novels include "God's Prisoner," "Profit and Loss," "Broken Shackles" verse "Bees in Amber," "Winds of the Dawn"

Oxenstierna, Axel, Count (1831-1854), Swedish statesman was leader of the Protestant party in Germany (1612-5) acted as regent throughout the minority of Christina

Oxford, Robert Harley, Earl of (1661-1724) Eng statesman Queen Anne created

him Earl of Oxford and Mortimer, and Lord High Treasurer, but finally dismissed him from his office

Oxford and Asquith, Henry Herbert Asquith, 1st Earl of (born 1852), Brit statesman Home Sec (1892-95), Chancellor of the Exchequer (1905-8), Prime Minister (1908-16) created a peer (1925)

Ozanam, Jacques (1640-1717), Fr mathematician wrote "Dictionnaire des Mathematiques," "Cours des Mathematiques," etc

Ozall, John (died 1743), Eng writer, satirized by Pope in "The Dunciad"

Ozeroff, Vladimir Alexandrovich (1770-1816), Rus poet, wrote *Faust*, *Odes*, and other tragedies, also some lyrical poems

Pacehoretto, Jacopo (born 1474), It painter born at Siena, a "Madonna and Child" by him is in the National Gallery

Pachmann, Vladimir de (born 1848), Rus, pianist esteemed especially as an exponent of Chopin and Beethoven

Pacuvius, Marcus (220?-130 B.C.), Rom poet and painter, much esteemed by Cicero

Paderewski, Ignace Jan (born 1859), Polish pianist and composer 228.

Padilla, Juan de (1484-1521), Sp soldier, put to death by Charles V for having headed a constitutional movement in Spain

Paganini, Nicolo (1784-1840) It violinist, born at Genoa his performance on a single string and his mysterious personality created for him a world wide reputation

Pagel, Wallis Himes (1855-1918), Amer scholar and editor, ambassador to Gr Brit (1913-18)

Pagel, Pierre Marie, Viscount de (1748-93), Fr navigator sailed in Bougainville's expedition to the S. Pole, and afterwards went as far as 8° 30'

Paget, Sir George Edward (1809-92), Eng physician Pres of the British Medical Association (1864), and of the General Medical Council of the U.K. (1869-74)

Paget, Sir James (1814-69), Eng surgeon brother of the above, born at Great Yarmouth, published "Report on the Results of the Use of the Microscope" (1842), "Lectures on Surgical Pathology," and other works received a baronetcy (1871)

Pain, Barry (born 1867), Eng humorous author and journalist, works include "In a Canadian Camp," "Another Englishwoman's Love Letters," "Lulu," "Eliza Getting On," and "The Problem Club"

Paine, Thomas (1737-1809) Eng writer went to Amer by advice of Franklin in 1774, and soon afterwards published his pamphlet "Common Sense," was prosecuted for his "Rights of Man" in 1792 his "Age of Reason" appeared between 1793 and 1795, he died in New York

Painlevé, Paul (born 1863), Fr statesman, Premier of Fr (1917 and 1925)

Paisiello, Giovanni (1741-1816) It musical composer of the Neapolitan school, his chief opera was *Nina*

Palafox, Franz (1798-1876), Bohemian historian author of "The History of Bohemia" (1838-67)

Palafox y Meliz, José de (1780-1847), Sp gen, successfully defended Saragossa against the Fr (1808), but was obliged to surrender after a second siege

Paleasio, Aemio, also known as Antonio della Paglia (1600-70), It scholar, was put to death at Rome by the Inquisition

Palestrina, Giovanni Pierluigi de (1524-94), It musician, his chief works were sacred, the Mass of Pope Marcellus being the best known

Palgrave, Sir Francis (1788-1861), Eng historian, of Jewish extraction was knighted for his historical works, the chief of which were "The Rise and Progress of the English Commonwealth" and "History of Normandy and England"

Palgrave, Frances Turner (1824-97), Eng. poet and critic, son of preceding, his

- chief works are *Lyrical Poems* (1871) and the compilation entitled *Golden Treasury of English Songs*.
- Palgrave, William Gifford** (1826-88) Eng diplomatist and Arabic scholar son of Sir Francis Palgrave his chief work is *Narrative of a Year's Journey through Central and Eastern Arabia*.
- Palissy, Bernard** (c. 1510-90) Fr potter and enameller made the ware which is known by his name.
- Palladio, Andrea** (1518-80) It architect rebuilt the Palazzo della Razione at Vicenza also built the churches of St George and the Redemptor at Venice.
- Pallavicino, Sforza, Cardinal** (1607-67) It writer author of *Istoria del Concilio di Trento*.
- Paln, Johann Philipp** (1768-1806) Ger bookseller of Nurnberg, his arbitrary arrest and execution by order of Napoleon on a charge of selling the pamphlet *Ceremony in her Deepest Humiliation* did much to kindle the war of Liberation.
- Palma Jacopo** (died c. 1528) It painter (called Il Vecchio) his *Annunzio dei Lavori* is in the Louvre his great nephew of the same name (died 1628) is known as Il Giovine.
- Palmer, Charles Ferrar** (born 1819) Eng antiquary author of *History of the Town and Castle of Tamworth* joined the Dominicans (1853) and published several works relating to the order.
- Palmer, Edward Henry** (1840-82) Eng cricketer author of *Oriental Mysticism* etc.
- Palmerston, Henry John Temple 3rd Viscount** (1784-1865) Brit statesman born at Broadlands Hampshire entered Parl (1807) held various offices becoming First Lord of the Treasury in 1848 which office he held till 1857 was again Premier from June 1859 till his death was buried in Westminster Abbey.
- Palmer, Luigi** (1807-96) Ital meteorologist he and (1834) director of the Venusian Observatory constructed an electrometer a pluviometer and a seismometer.
- Pamphilus** (c. 190-104 B.C.) Athenian philosopher taught at Rome and left works on one of which *Cicero*, *De Officiis* is said to be founded.
- Pamphus, Sir Anthony** (1797-1879) It bibliographer became principal librarian of the British Museum from 1846 1866 having previously been keeper of printed books for nearly 20 years.
- Paoli, Pasquale de'** (1746-1807) Corsican patriot headed the struggle for independence against Genoa.
- Papa, Denis** (1647-1712) Ir physician published an account of a machine he had invented called the New Digester (1681).
- Papinianus** (fl. 212) Rom jurist of great repute was beheaded by order of Caracalla.
- Papirius Cursor**, Rom hero was twice dictator (325 and 277 B.C.).
- Paracelsus, Theophrastus** (*1493 1541) Swiss empiric obtained a great reputation from his claim to have discovered the *chrys vile* and by some cures he effected.
- Paros, Julia** (1806-62) Eng writer lived some time in Constantinople and published *The City of the Sultan* (1837) a *Romanse of the Harem* etc.
- Paré, Ambroise** (1510-90) Fr surgeon appointed surgeon to Henry II of Fr and his sons was afforded protection by Charles IX during the massacre of St Bartholomew.
- Parini, Giuseppe** (1729-90) Milanese poet of humble birth his chief works are *Il Giorno* a satire and *Le Odi*.
- Paris, Gaston** (1839-1907) Ir philologist born at Avenay author of *Histoire Poétique de Charlemagne* (1866) and other works.
- Paris, Louis Philippe d'Orléans, Count of** (1834-94) grandson of King Louis Philippe was born at Paris on the 24th Aug 1834 the Count of Paris recognised the Count of Chambord as head of the royal house and on the death of the latter in 1883 Louis Philippe was acknowledged as his successor in 1886 he was exiled from Fr.
- Park, Mungo** (1771-1806) Scot traveller 1783.
- Parker, Sir Gilbert** (born 1862) Brit novelist and politician born in Canada author of *Pierre and His People* *The Seats of the Mighty* *The World in the Crucible* *The Trail of the Sword* (*arnae*) *Polly* etc.
- Parker, Sir Hyde** (1714-82) Brit sailor fought a fierce but indecisive action with the Dutch off the Dogger Bank (1781) lost his life at sea.
- Parker, Sir Hyde** (1807) Brit sailor second son of preceding commanded the expedition to the Baltic in 1801 and gave the signal which Nelson did not obey at the bombardment of Copenhagen.
- Parker, Joseph** (1830-1902) Eng Congregational preacher opened the City Temple London (1874) published a number of theological works.
- Parker, Matthew** (1604-75) Archbishop of Canterbury superintended the issue of *The Bishop's Bible*.
- Parker, Theodore** (1810-60) Amer minister ejected by the Unitarians he became leader of a society of free thinkers.
- Parkes, Sir Henry** (1815-96) Australian statesman born in Warwickshire was premier from 1872-75 in 1877 from 1878-83 and from 1887-91.
- Parkman, Frances** (1823-93) Amer writer born at Boston wrote many books on American and Canadian history.
- Parmanides** Gk Eleatic philosopher flourished about 500 B.C.
- Parmenides** (died 380 B.C.) general of Philip of Macedonia and Alexander the Great was put to death by the latter on suspicion of conspiracy.
- Parmigiano, Francesco Mazzola** (1604-40) It painter his *Madonna and Child with St John* is now at Florence and the *Madonna della Rosa* in Dresden Gallery.
- Parnell, Charles Stewart** (1848-91) Ir politician entered public life as member for Meath in 1875 in 1886 became leader of the Irish Party and continued to be the most prominent Irishman in politics until his death he greatly influenced Gladstone in his Home Rule for Ireland policy was more than once arrested and imprisoned.
- Parnall, Thomas** (1879-1718) Ir poet author of *The Hermit* and other works.
- Parr, Catherine** (1511-46) Queen of Fr 6th wife of Henry VIII became Queen (1543) she survived Henry and in 1547 married Lord Seymour of Sudely the future sovereign Edward VI Mary and Elizabeth owed much to her good influence.
- Parr, Thomas** (*1483 1636) Eng centenarian known as Old Parr is said to have laboured as a husbandman after attaining his 130th year.
- Parratt, Sir Walter** (1841-1924) Eng musician for many years Master of the King's Music.
- Parthenius** (fl. c. 400) Gk painter contemporary with Socrates.
- Parry, Sir Charles Hubert Hastings, Bart** (1848-1918) Eng composer whose chief productions are *Judith* and *Ode for St Cecilia's Day*.
- Parry, Sir William Edward** (1790-1855) Arctic explorer in 1827 he attempted to reach the North Pole in a ledge an account of this voyage appearing with that of others in the official *Journal*.
- Parsons, Sir Charles Algernon** (born 1834) Eng engineer inventor of the steam turbine now used in the largest steam ships.
- Parsons, Robert** (1546-1610) Eng Jesuit priest born in Somerset active after the Eng Reformation.
- Parson, James** (1822-91) Amer writer born at Canterbury but was taken to Amer when a child wrote *Life and Times of Benjamin Franklin* etc.
- Partridge, Bernard** (born 1861) Kn artist contributor for many years to *Punch*.
- Passal, Blaise** (1623-62) Fr philosopher and mathematician wrote a treatise on comic sections at sixteen and soon after invented a calculating machine strongly opposed the Jesuits in his *Lettres Provinciales* his *Pensées* being published after his death.
- Pastorovich, Ivan Fedorovich** (1782-1856) Rus general conducted the war against Persia in 1826 gov of Poland.
- Pastorini, Carlo Abbé** (1812-87) It priest was a leader of the Independent Liberal party in the It parl.
- Pastorini, Gaudenzio Samson** (1702-69) Fr optician author of a treatise on the construction of telescopes.
- Pasta, Giodatta** (1798-1865) It operatic singer of Jewish descent made her first successful appearance in 1820.
- Paster, Louis** (1822-95) Fr chemist 831.
- Pater, Walter** (1839-94) Eng writer published *The Renaissance* *Marius the Epicurean* (1886) etc.
- Pateron, William** (1658-1719) Scot financier 1198.
- Patterson, Coventry Kersey Dighton** (1823-98) Eng poet his chief works are *The Angel in the House* and *The Unknown Eros*.
- Paton, Sir Joseph Noel** (1821-1901) Scot artist born at Dunfermline among his pictures are *The Quarrel of Oberon and Titania* *The Reconciliation* *The Pursuit of Pleasure* (1855) *Dawn* *Lucifer at Frankfurt* (1861) and *Faith and Reason* (1871).
- Patrick, Saint** (874-464) patron saint of Ireland whether he came in 433 from Scotland where he was born.
- Patterson, John Coleridge** (1827-71) Eng missionary appointed Bishop of Melanesia in 1861 but ten years later was murdered by the natives.
- Patte, Adolphe** (1843-1919) Anglo-It operatic singer born at Madrid for many years the most renowned of vocalists appeared at New York as *Lucas* in 1869 and at Covent Garden in 1861 in that and other parts in 1864 she sang as *Margherita* and in 1867 as *Juliet* and subsequently took part in successive Handel festivals and appeared in Continental cities.
- Pattison, Mark** (1812-84) Eng scholar an active university reformer his chief works were *Life of Casaubon* (1875) *Milton in the Men of Letters series* etc.
- Paul I** (1754-1801) Emperor of Rus succeeded Catherine II in 1796 became deranged and was assassinated.
- Paul, name of** five Popes Paul I (died 767) elected Pope of Rome in 767 Paul II (1417-71) was elected in 1464 printing was introduced at Rome during his pontificate Paul III elected 1534 excommunicated Henry VIII of Fr Paul IV (1476-1559) elected in 1555 opposed the Sp but was coerced into alliance by the Duke of Alva Paul V (1552-1621) elected in 1605 was a munificent patron of the fine arts.
- Pauls, Saint** (347-404) Rom lady founded the monastery of Bethlehem.
- Paulding, James Kirke** (1779-1860) Amer writer wrote *The Dutchman's Fire* and other novels.
- Paul, Reinhold** (1823-82) Ger historian wrote *Life of King Alfred* etc.
- Paulinus, Saint** (died 644) Eng prelate accompanied Edwin to Northumbria and converted him.
- Paxon, Sir Joseph** (1803-65) Eng horticulturist and architect designed the building for the Exhibition of 1851 afterwards the Crystal Palace.
- Pays, James** (1830-98) Eng novelist published numerous novels among which were *Lost Sir Masingbard* *The Clyffards of Clyffe* *By Proxy* *The Luck of the Darrells* etc.
- Payne, John Howard** (1792-1852) Amer actor and dramatist composed a number of pieces in one of which the air *Home Sweet Home* occurs edited the *London Opera Glass* (1826-27).
- Peabody, George** (1795-1869) Amer philanthropist gave half a million for housing scheme for the London poor founded and endowed many institutions in the United States.
- Peacock, Sir Barnes** (1810-90) Anglo-Indian judge chief justice of the Supreme Court of Calcutta.
- Peacock, Thomas Love** (1785-1846) Eng novelist and poet author of *Headlong Hall* and other novels.

Pears, Sir Edwin (1855-1919) Eng bar-
rister while practising at the Con-
stantinople Bar first called attention of
the British public to the Bulgarian
atrocities of 1876

Pearson, Sir Cyril Arthur (1866-1922), Eng
journalist founded a number of period-
icals and built up a big publishing
business also founded the *Daily Es-
press* (1900) becoming blind himself he
devoted his last years to a magnificent
work having for its object the training of
blinded soldiers in useful trades and
handicrafts

Pearson, John (1813-86) Eng divine
Bishop of Chester his *Exposition of
the Creed* appeared in 1859

Pearry, Robert Edwin (1856-1920) Amer
Arctic explorer made several expedi-
tions to the north polar regions on
the 6th April 1909 reached the North
Pole, being the first to achieve this great
distinction

Peacock, Reginald (1895?-1460?) Welsh
author and bishop successively of St
Asaph and Chichester deprived and
imprisoned for a book denying the Real
Presence

Peal, Arthur Wellesley, Viscount (1829-
1912) youngest brother of Sir Robert
Peel became Sec to the Board of
Trade in 1871 See to the Treasury in
1873 in 1884 he was elected speaker

Peel, Sir Robert, Bart (1788-1850) Brit
statesman eldest son of the 1st baronet
entered Parl in 1811 and became Under
Sec for the Colonies was Sec for Ire-
land (1812-18) was appointed to the
Home Office (1822) and succeeded
Canning as leader of the Commons (1827)
and from 1841-46 he was Prime Minister
He died from the consequences of a fall
from his horse

Peels, George (circa 1558-98) Eng poet
wrote plays as well as a *Chronicle of
Edward I*

Pellistratus (600?-527 B.C.) Tyrant of
Athens was twice expelled but regained
his power

Pelagius (circa 380-450) Brit monk whose
name was Morgan founded a sect at
Rome

Pelham, Henry (1695?-1754) Brit states-
man was Prime Minister from 1741
till his death and reduced the interest on
the National Debt

Pelissier, Amable Jean, Duc de Malakoff
(1784-1864) Marshal of France served
in Spain the Morca and Algeria where
he was Governor

Pellegrini, Carlo (1828-89) It carica-
turist contributed to *Vanity Fair*
under the pseudonym of Ape

Pellico, Silvio (1788-1864) It writer
author of several tragedies was im-
prisoned by the Austrian Govt
from 1820 to 1830 and wrote *Le mie
Prigioni* (1832) an account of his life
in the prison of Spielberg

Pellissier-Pontannes (1824-93) Fr historian
author of *Histoire de l'Academie
Francaise* *Histoire de Louis XIV*
and other works

Peloponnes (died 364 B.C.), Theban general
expelled the Spartans from his city in
379 B.C. killed after his victory at
Cynoccephalus

Pemberton, Sir Francis (1625-97) Eng
judge presided at the trial of Russell
and Sydney but was dismissed for his
moderation

Pemberton, Max (born 1863) Eng novelist
and playwright among his best known
stories are *The Impregnable City*,
My Sword for Lafayette, *The Iron
Prate* and *Captain Black* his
plays include *The Dancing Master*, *The
Fighting School* and *Lights Out*, he
was editor of *Chums* (1892-98), and
Carroll's Magazine (1896-1906)

Pemroke, Richard de Clare, Earl of (died
1176) known as Strongbow assisted
Dermot MacMurrough to regain Leinster
and after taking Dublin succeeded him
in 1171 surrendered his kingdom to
Henry II receiving it back in fee

Pemroke, William Marshal, Earl of (circa
1146-1219), Eng statesman supported
King John and as regent during the
minority of Henry III defeated Louis of
France

Penda (? 577-655), King of Mercia, the last

supporter of paganism among the Anglo-
Saxons was killed in battle with Offa
at Winwood

Pemley, William Sydney (1851-1912) Eng
actor and theatrical manager achieved
chief successes in *The Private Secretary*
and *Charley's Aunt*

Penn, William (1644-1718) founder of
Pennsylvania son of Sir W Penn who
with Venables took Jamaica became a
Quaker while at Oxford in 1682 founded
Philadelphia he was in great favour at
Court under James II

Pennant, Thomas (1720-98) Welsh natu-
ralist and antiquary was friend and
correspondent of White of Selborne

Pennell, Joseph (born 1860) Amer etcher
joint author with his wife (Elizabeth
Robins) of *A Life of Whistler*

Pepin d'Héristal (died 714) father of
Charles Martel became King of Austrasia
in 687 and ruled the Franks from 687 to
his death

Pepin le Bref (714-68) King of the Franks
and father of Charlemagne founded the
Carolingian dynasty (752) and by
helping Stephen III against the Lomb-
ards founded the temporal power of
the popes

Pepper, John Henry (1821-1900) Eng
analytical chemist improved Henry
Duck's rough model which became
known as *Pepper's Ghost*

Pepusch, Johann Christoph (166?-1752)
Ger musician organist to the Charter
house

Peppys, Samuel (1633-1703) Eng diarist
Sec to the Admiralty under Charles II
and author of the valuable *Diary*
which was published by Lord Br-
brooke in 1825 from the MS at Magdalene
College Cambridge

Perceval, Spencer (1762-1812) Brit states-
man became Premier in 1809 and
carried the Regency Bill in 1811 but the
following year was shot by a Liverpool
broker named Bellingham in the lobby
of the House of Commons

Perceval, John (1834-1918) Eng prelate
and educationist became head
master of Rugby having also been first
head of Eton College (1862-78) took
chief part in the foundation of Universi-
ty College Bristol bishop of Hereford
(1895-1918)

Percy, Sir Henry (1364-1403) son of the
1st Earl of Northumberland was called
Hotspur killed at the battle of Shrews-
bury

Percy, Thomas (1729-1811) Eng divine
collected and published *Reliques of
Ancient Poetry*

Perdiccas (died 321 B.C.) Macedonian
general lieutenant of Alexander and
regent for his successor

Perez, Antonio (1540-1611) Sp statesman
for many years Sec of state under
Philip II

Pergolesi, Giovanni Battista (1710-36) It
composer his best works were his
Babat Mater and the opera *La Serva
Padrona*

Perseus (625?-356 B.C.) succeeded Cyp-
selus as Tyrant of Corinth

Pericles (499-429 B.C.) Athenian states-
man fortified the city and beautified
it with the Parthenon the Odeon and
the Propylaea patronized Sophocles
Euripides and Phidias

Perrin, Sir William Henry (1858-1907) Eng
chemist assistant to Hofmann dis-
covered aniline purple or mauve
and made several other chemical dis-
coveries

Perrault, Charles (1628-1703) Fr writer
whose *Parallele des Anciens et des
Modernes* (1696) gave rise to a famous
literary controversy his brother
Claude (1618-89) built the colonnade
of the Louvre

Perrot, Sir John (? 1527-92) Eng courtier
was sent to Ireland as pres of Munster
in 1572 and became lord deputy in 1583
but died in the Tower

Perry, John (1860-1920) Brit physicist and
electrician gained the silver medal of
the Society of Arts for his lecture on
*The Future Development of Electrical
Appliances*, wrote many books on
mechanics

Pershing, John Joseph (born 1860), Amer
general, commander in chief of the

Amer forces in France during the
World War

Persigny, Jean Gilbert Victor Emlin, Duc de
(1808-72) Fr statesman prominent in
the coup d'etat was twice Minister of
the Interior under Napoleon III

Persius Flaccus (34-62) Rom satiric poet
friends of Lucan and Seneca

Pertinax, Helvius (126-193) was made
Emperor of Rome in 193 but assassi-
nated two months after

Perrugino (1445-1524) It painter proper
name Pietro Vannucci kept a school at
Perugia and had Raphael as a pupil
1550

Perruzzi, Baldassare (1481-1596) It painter
and architect helped Raphael with
the *Armenian* and designed the Palazzo
Massimo

Pestalunz, Johann Hermann (1746-1827)
Swiss educationist as a schoolmaster
at Burgdorf and Yverdon practised his
inductive system

Pétain, Henri Philippe (born 1856) marshal
of Fr for a time after his successful
defence of Verdun commanded Fr
forces on the W front in World War
(1914-18)

Peter I (1672-1725) Tsar of Rus 1673

Peter II (1715-30) Tsar of Rus grandson
of preceding succeeded Catherine I in
1730

Peter III (1728-62) Tsar of Rus suc-
ceeded the Tsarina Elizabeth in 1761
was compelled to abdicate and was
strangled 1231 1232 1233

Peter the Hermit (died 1115) Fr monk
who preached the first crusade in 1095
and led the crusaders to Palestine

Peterborough, Charles Mordaunt, Earl of
(circa 1608-1733) Eng soldier and
diplomatist distinguished himself in
Spain

Peters, Hugh (1598-1680) Eng divine
chaplain to Cromwell hanged after the
Restoration

Pétion de Villeneuve, Jérôme (1756-94)
Fr revolutionist acted with Robespierre
elected mayor of Paris in
November 1791 joined Girondists and
was compelled to leave Paris found
dead at St-Jmillion

Petri, Sir Dunshaw Maneski (1823-1901)
Parsce philanthropist founded a super-
hospital at Bombay

Petőfi, Sándor (1823-49) Hungarian poet
his poems were published in 1847 killed
in a battle at Bacsvar

Petrarch, Francesco (1304-74) It poet
with Boccaccio took an active part in
the revival of learning and was crowned as
laureate in the Capitol in 1341

Petrie, George (1788-1868) Fr archaeologist
wrote treatises on *The Origin and Uses
of the Round Towers* etc

Petrie, Sir William Matthew Flinders (born
1813) Eng Egyptologist measured and
surveyed the pyramids and temples of
Gizeh (1881-82) discovered the lost
city of Aukratis

Petrie, John (1839-93) Scot painter
among his works are *The Rehearsal*,
The Death Warrant, *The Vigil*
(1884) etc became R.A. in 1873

Pettigrew, James Bell (1814-1908) Scot
medical writer his best known work is
Animal Locomotion or, *Walking*,
Swimming and *Lying*

Petty, Sir William (1623-87) Eng poli-
tician and economist surveyed for
Henry Cromwell the forfeited Irish
estates wrote *Political Arithmetic*,
The Political Anatomy of Ireland
etc

Phaedo (fl circa 400 B.C.) Gk philosopher
disciple of Socrates, founder of the
Elia school

Phaedrus (fl circa A.D. 14) Lat writer
whose "fabulae" were first printed in
136

Phalaris (died circa 554 B.C.) Tyrant of
Agriguntum which city he took about
570 B.C.

Phidias (490-432 B.C.), Gk sculptor,
1136, 1140

Phelps, Samuel (1804-78), Eng actor
associated with Macready at the Hay
market manager of Sadler's Wells, he
was equally successful in tragedy and
comedy, among his parts were Macbeth
Othello, Lear and Bottom, 76

Pherecydes (born 800 B.C.), Gk philosopher,

said to have invented comedy another Pherecydes, who lived earlier, wrote a "History of Athens"

Philemen (born 320 B.C.), Gk comic poet said to have died of laughter

Philip II (382-336 B.C.), King of Macedonia ascended the throne in 380 B.C., in 356 he attacked the phalanx, made Thrace and Thessaly tributary, and defeated the Athenians

Philip V (c. 237-178 B.C.), King of Macedonia, began to reign in 221 B.C., defeated by the Romans at Cynoscephalae (197 B.C.)

Philip I (1052-1108), King of Fr. crowned in 1059, and succeeded Henry I the following year

Philip II (1155-1223), King of Fr., known as Philip Augustus, son of Louis VII, whom he succeeded in 1180 won the victory of Bouvines over the Germans in 1214

Philip III (1245-85), King of Fr., called the Bold, succeeded Louis IX in 1270

Philip IV (1268-1314), King of Fr., called the Fair, succeeded Philip III, suppressed the Templars

Philip V (1294-1322), King of Fr., called the Long, succeeded John I in 1316, during this reign the Salic law was established

Philip VI (1293-1350), King of Fr., known as Philip of Valois succeeded Charles in 1328, Edward III defeated him at Crécy (1346)

Philip I (1478-1506), King of Sp., son of Maximilian I and Mary of Burgundy, succeeded to the crown of Spain on the death of Isabella (1504)

Philip II (1527-98), King of Sp. succeeded upon the abdication of Charles V in 1555 his reign was marked by the loss of the Armada (1588)

Philip III (1578-1621), King of Sp., son of the preceding by his third wife, during his reign the Moors were expelled from Granada

Philip IV (1605-65), King of Sp., succeeded Philip III, lost Portugal in 1660

Philip V (1678-1746), King of Sp., grand son of Louis XIV., became involved in the 4th succession war, which broke out in 1701

Philip the Bold (1342-1404), Duke of Burgundy, became one of the most powerful princes of his time

Philip the Good (1396-1467), Duke of Burgundy, grandson of the preceding, founded Order of Golden Fleece

Philips, Ambrose (1675-1749), Eng. poet, published in 1710 "Pastorals, Epistles, Odes, and other Original Poems"

Philips, John (1676-1708), Eng. poet, chief works "The Splendid Shilling" (1704) and "Cider" (1706)

Philimore, Sir Robert Joseph (1810-85), Eng. ecclesiastical lawyer, as judge of the Court of Arches (1867-78) he heard *Martin v Mackonochie* and other celebrated cases created baronet in 1881

Phillips, John (1817-87), Scot. painter, whose chief subjects were drawn from Spanish life

Phillips, Stephen (1886-1915), Eng. poet and dramatist (*Marpessa, Paolo and Francesca, Ulysses, Herod*)

Phillips, Wendell (1811-84), Amer. abolitionist, succeeded Lloyd Garrison as pres. of the Anti-Slavery Society

Phillipotts, Eden (born 1852), Eng. novelist and poet born in India, author of "Children of the Mist," "Widcombe Fair," "The Lavender Dragon"

Phillipotts, Henry (1778-1869), Eng. divine, was Bishop of Exeter from 1830 till his death

Philopomenus (252-183 B.C.), Greek general, the last of the Greeks, took Sparta, captured and poisoned by the Messenians

Phleeson (402-317 B.C.), Athenian statesman, opposed Demosthenes, member of pro-Macedonian party, was compelled to drink hemlock for alleged treason

Phormion (died c. 428 B.C.) Athenian admiral, won two naval victories in the Peloponnesian war in 429 B.C.

Phocas (c. 880-891), Byzantine scholar, several times Patriarch of Constantinople, excommunicated the Pope in 887, but

was finally deposed in 886, his chief work is "Myrobiblion"

Pinth, Alfredo (1822-1901) It violoncellist and composer, made his first appearance in London in 1844, when he played before the Philharmonic Society

Pinelomani, Ottavio (1599-1656) It general served Austria during the Thirty Years' war

Pinogru, Charles (1761-1804), Fr. general rose from the ranks to be general under the Republic, for which he defeated the English and conquered Holland

Pinning, Edward Charles (1848-1919), Amer. astronomer, became director of the Harvard Observatory and professor of astronomy in 1876

Pio della Mirandola, Giovanni (1468-94), It. scholar, of extraordinary acquirements, offered to discuss nine hundred theses against all comers

Piston, Sir Thomas (1758-1815), Brit. soldier, distinguished himself in the Peninsula by the capture of Badajoz (1811), was killed at Waterloo

Pizarro, Franklin (1804-69), 14th Pres. of the U.S.A., he was a supporter of the continuance of slavery

Pizarro, Nicolas de (1889-1918), Pres. of Peru, was impeached at the close of his term of office as minister of finance and went into exile, was pres. from 1895-99

Pilate (died 30), was appointed governor of Judaea in 27

Pishar, Percy S. (died 1899), Brit. pioneer of flying 340

Pindar (522-443 B.C.) Gk lyric poet member of one of the noblest families of Thebes, most of his odes were written about the events and personages of his time

Pinel, Philippe (1745-1826), Fr. physician introduced the modern system of treatment of lunatics

Pinner, Sir Arthur Wing (born 1855), Eng. dramatist and actor, author of *2nd Second Mrs. Tanqueray, Treachery of the Walls, The Gay Lord Quex*, and other successful plays

Pinkerton, John (1758-1826), Scot. writer his chief work is his *Collection of Voyages and Travels*

Pinturicchio, Bernardino (1454-1513) It. painter, one of the foremost painters of Umbrian school

Pinsen, Marino Alonso (died 1463) Port. navigator, accompanied Columbus on his first voyage to the Indies, his brother, was also with Columbus and afterwards explored Guiana and Mexico

Piora, Sebastiano del (1455-1547) Venetian painter, his chief work "The Raising of Lazarus," is in the National Gallery, London

Pionis, Hendrik (1741-1821), Eng. author, friend of Dr Johnson married first Mr. Thrale and then Signor Pionis

Piranesi, Giovanni Battista (1720-78), It. engraver, executed numerous prints of ancient and modern buildings of great value to present day architects

Piron, Alexis (1689-1773), Fr. dramatist, his chief play was *Le Métempsé* (1738)

Pirrie, William James, 1st Viscount (1847-1924), Brit. shipbuilder, 1861

Pisano, Niccolò (c. 1206-78), called "Nicholas of Pisa", It. sculptor, his chief works are at Pisa, Bologna, and Siena, 1146

Pitman, Sir Isaac (1818-97), Eng. school master, inventor of phonetic shorthand, published in 1837 his "Stenographic Soundhand" founded the *Phonetic Journal* (1842)

Pitt, Thomas (1653-1726) Brit. E. India merchant, sat in the House of Commons for several years was grandfather of the Earl of Chatham

Pitt, William See Chatham, 1st Earl of

Pitt, William (1759-1806), Brit. statesman, second son of the Earl of Chatham, entered Parl. in 1781, and was appointed Chancellor of the Exchequer in 1782 became Prime Minister in 1783, and occupied the office of Chancellor of the Exchequer, he held the premiership till 1801, resigning through ill health, he again held office from 1804 until his death, he was one of Britain's most brilliant statesmen, 586, 587.

Pius II (1405-84), Pope. Aeneas Sylvius Piccolomini elected in 1458 was a great orator and had literary abilities

Pius IV (1498-1565) Pope, Giovanni Angelo de' Medici elected in 1559 issued a bull confirming the Council of Trent

Pius V (1504-72) Pope, Michele Ghislieri elected in 1566, excommunicated Queen Elizabeth and suppressed heresy, carried out many religious reforms

Pius VI (1717-99), Pope, Giovanni Angelo Braschi, elected in 1776, was dethroned and expelled from Rome by the French in 1798

Pius VII (1742-1823) Pope, Count Chiaramonte, elected in 1800, crowned Napoleon, but excommunicated him in 1809 after the capture of Rome, was reinstated in 1814

Pius VIII (1761-1830), Pope, Count Castiglione was elected in 1829

Pius IX (1792-1878) Pope, Giovanni Mastai Ferretti, was elected in 1846 in 1859-60 he lost the greater part of his dominions, but was defended in Rome by a French garrison, in 1870, when the French left Rome, it was declared the capital of Italy, and was occupied by the troops of Victor Emmanuel

Pizarro, Francisco (1478-1541) Sp. conqueror of Peru founded Lima in 1535 six years later he was assassinated by the friends of Almagro, a rival whom he had caused to be executed, his brother Gonzalo, who had accompanied him was put to death in 1548 for a revolt against the Spanish viceroy

Planché, James Robinson (1796-1880) Brit. antiquarian and dramatist of Huguenot descent wrote a "History of British Costume" (1834), and numerous plays

Planchette, Robert (1848-1903) Fr. composer, chief productions *Les Cloches de Corneville, Rip Van Winkle and Paul Jones*

Plato (427-347 B.C.) Gk philosopher 501

Plautus, Titus Maccius (c. 251-184 B.C.) Rom. dramatist, 20 of his comedies are extant

Playfair, Lyon, 1st Baron (1819-98) Brit. chemist and statesman professor of chemistry at Edinburgh (1848-1869) Postmaster-General (1873-74), Deputy Speaker (1880-83) 324

Planché, Samuel (1814-98) Brit. politician represented Derby from 1868 to 1890 caused to be passed amendments of the shipping laws (1876) safeguarding the lives of sailors

Play the Elder (23-79) Rom. writer whose full name was Gaius Plinius Secundus his greatest work is his *Natural History*, lost his life by suffocation through approaching too near to Vesuvius

Play the Younger (61-113?) Rom. writer, whose full name was Gaius Plinius Cerealis Secundus, nephew of preceding and author of "Epistles" was made consul by Trajan, to whom, when he was proconsul in Bithynia, he wrote an account of the Christians

Plotinus (c. 203-274) Gk philosopher founder of the Neo-Platonic school

Plumer, Herbert, 1st Baron (born 1857) Brit. soldier, served with distinction in S. African War (1899-1902), and World War (1914-18), raised to peerage (1918) appointed High Commissioner and Commander in chief of Palestine (1925)

Plumptre, Edward Hayes (1821-91), Eng. divine, one of the revisers of the Bible

Plunket, William Conyngham, 1st Baron (1764-1854), Ir. judge in 1827 he became a peer and Chief Justice of the Common Pleas, and from 1830 till 1841 was Lord Chancellor of Ireland

Plunket, William, 4th Baron (1828-97), Ir. peer, grandson of the above, was Bishop of Meath from 1876 to 1884, in which year he became Archbishop of Dublin

Plunkett, Sir Horace (born 1854), Ir. statesman, founder of the Ir. Agricultural Organisation Society, member of Parl. (1892-1900), author of "Ireland in the New Century" (1904), etc.

Plutarch (c. 48-122) Gk philosopher, biographer and writer, author of "Parallel Lives of Greeks and Romans" and "Moralia"

Pococke, Richard (1704-65), Eng. traveller successively Bishop of Ossory and Meath author of "Description of the

cure the money to send Dr Inglis out on what was to be her great enterprise, with a unit fully equipped to work with the Serbian army.

It is not possible here to give a complete history of the work done by Dr Elsie Inglis's unit in Serbia—though that is a history which ought to be written. During the early days of the existence of the Scottish Women's Hospital units, Dr Elsie Inglis remained at home, organizing and directing the many operations necessary to ensure their adequate equipment, and their safe transport overseas. There were still many difficulties and objections to be overcome before those in authority in Government circles accepted the scheme for hospitals, staffed entirely by women, to serve abroad with the allied armies in the various theatres of war.

Combating Deadly Disease

It was in the spring of 1915, when the acting head of the first Serbian unit went down with diphtheria, that Dr Elsie Inglis went out to Serbia to take charge of the unit herself. The hospital was situated at Kraguevatz, and was primarily established as a "typhus hospital," to combat the dread disease which ravaged the whole of Serbia in 1915, but, in addition, there were two subsidiary buildings, one for the treatment of relapsing fever and general diseases and the other for surgical cases.

When Dr Elsie Inglis arrived at Kraguevatz in May, 1915, she found that her unit which had been sent out to take charge of 300 beds was attending 550. This is typical of the difficulties with which British women found themselves perpetually faced. The Serbs were tremendously enthusiastic about the British units, and almost pathetically anxious to help in any possible way, but typhus had so great a hold on the country and the daily death roll rose to such fantastic figures, that they were entirely unable to deal with the situation without assistance.

Conditions in Serbian Hospitals

When the British doctors and nurses arrived, the conditions in some of the Serbian hospitals were beyond description. Long rows of straw beds, with no space between two patients to each bed (heads and feet alternately to save space), closed windows, insufficient and unsuitable diet, coupled with a complete lack of disinfectants and sanitation—these were among the difficulties with which they had to contend.

A strict rule had to be made in regard to the number of patients to be admitted, and it was sometimes very hard to convince the Serbian officials that a hospital of 300 beds could not accommodate 450 patients. Fever-stricken men, sometimes already in the last

stages of the disease, would arrive at the hospital in filthy bullock wagons, and it was the heartbreaking duty of the doctor in charge to explain that the beds were full and that it was impossible to admit additional patients, as the only chance of stemming the tide of the epidemic was to prevent contact between the patients.

It was in such circumstances as these that Dr Elsie Inglis stood out as a heroine. Steadfastly she faced the Serbian officials, and firmly refused to endanger the lives of both patients and nurses by overcrowding. Then, having won the battle, she would hurry back

ANOTHER OF HER ANCESTORS



The features of Dr Elsie Inglis, great aunt Mrs Robertson—Katherine Inglis before her marriage—have been preserved for posterity by the magic touch of Raeburn's brush.

to the hospital and hastily improvise additional accommodation by putting up camp beds in tents in the grounds adjoining the hospital building so that the superfluous patients should not be untended by the roadside.

Whenever Dr Inglis was complimented on the efficiency of her hospital organization or congratulated upon the skill with which the patients were tended, she would reply, "It is not I, it is the unit," and it was this happy facility for so closely associating herself with her colleagues that won for Elsie Inglis that honest and wholehearted admiration of every Englishwoman in Serbia, which was not infrequently withheld from the heads of other of the hospital units.

The Russians, warmly appreciating Dr. Inglis's efforts to relieve the sufferings of their wounded, helped her in every way. But, though they did their utmost to make her existence as comfortable as possible, the hardships she suffered lessened her strength day by day.

Communication with England became increasingly difficult, and towards the end was cut off altogether, but Dr. Inglis managed to get short messages through to her committee, and from time to time her friends and relations received letters full of the pride of service and enthusiasm for the work she was doing.

Coming Home to Die

At last, in November, 1917, came the news that she was on her way home, through Archangel, and for the first time came the warning "Have not been well—nothing to worry about." In reality she was dying, though on board the transport she was busily planning the organization for yet another unit—which, unhappily, was destined never to be formed.

On the journey home she had a relapse, violent pain set in, and she was forced to take to her bed. Even then her courage did not fail her. She insisted on checking the hospital accounts, she interviewed personally each member of her unit, and invited them to volunteer for service in a new hospital which she said she would form at Salonika.

The night before the transport arrived at Newcastle, Elsie Inglis became worse, and had no sleep at all, but she insisted on getting up next morning to bid farewell to the Serbian staff. Those who were with her say it was amongst the most impressive scenes they have witnessed.

She stood alone and unsupported, a splendid

and dignified figure, dressed in her worn uniform coat, and wearing her faded service ribbons, her face ashen and drawn with pain. It was after that parting that Dr. Elsie Inglis collapsed. She left the boat on the 25th November and arrived at her hotel in a state of complete exhaustion.

She now realized that her service was ended, and courageous in death as she had ever been in life, she broke the news herself to those who were anxiously gathered round her bed.

She was speaking of the closing days on board ship, and describing how a big liner had nearly collided with their transport in a storm, when suddenly the moorings of the transport broke, and they swung round and were saved. After a pause, Elsie Inglis added, "The same hand who cut our moorings then is cutting mine now, and I am going forth." The next day she died.

Impressive Burial Ceremony

It was on the 29th November, 1917, that Elsie Inglis was buried in Edinburgh, amidst such marks of respect and recognition as make her passing stand alone in the history of the last rites of her fellow-citizens. The flags of Great Britain and Serbia were placed on her coffin, and the lilies of France were around her, whilst over her head hung the torn banners of Scotland's history.

At her graveside her life's story was represented by those grouped around her—Serbian officers lowered all that was mortal in her to its last resting-place, while the military of her own nation and her women comrades and fellow-workers did homage to her memory.

[See "Dr. Elsie Inglis," by Lady Frances Balfour (1914); and "Elsie Inglis," by Mrs. Eva McLaren.]

ONE OF THE SCOTTISH WOMEN'S HOSPITALS IN FRANCE



Towards the end of 1914, Dr. Inglis went over to France to witness the establishment of the Scottish Women's Hospital, which was to work under the French Red Cross at Royaumont. The hospital shown in the picture was situated at Villers Cotteret, a little village not far from Royaumont.

For biographies not included in the Groups see detailed Index

East and Some Other Countries (1743-45)
Podiebrad, Georg von (1420-71) King of Bohemia was twice excommunicated as a Hussite
Poe, Edgar Allan (1809-49) Amer writer his chief works are *The Raven*, *The Bells* and other poems and *Tales of Mystery Imagination and Humour*
Poerio, Carlo (1803-67) Neapolitan patriot suffered long imprisonment in 1880 he became vice pres of the It Parl
Poisson, Raymond Nicolas (born 1840) Fr statesman in 1894 he was chosen Minister of Finance and later held office as Minister of Instruction in 1912 he succeeded Caillaux as Premier and took the office of Foreign Minister in 1913 he became Pres of the Republic returning in 1920
Pole, Reginald (1500-58) Eng divine determined opponent of Henry VIII appointed cardinal by Pope Paul III in 1538 on the accession of Mary he became Archbishop of Canterbury
Poisson, Jules, Prince de (1780-1847) Fr statesman by his reactionary measures, produced the revolution of 1829
Pollmann, Angelo (1554-94) It scholar tutor to the children of Lorenzo de Medici wrote *Miscellanea* comments on the classical *Geostri* a poem and *Orfeo* a musical drama
Polk, James Knox (1795-1849) Pres (11th) of the U.S. obtained the annexation of Texas and the cession of Upper California and New Mexico by Mexico
Pollaiuolo, Antonio (1429-98) It painter and sculptor his *Martyrdom of St Sebastian* is in the National Gallery
Pollus Gnaeus Aemilius (76 B.C. A.D. 4) Rom orator and writer none of his works exist reconciled Augustus and Antony and became the friend of Virgil and Horace
Pollack, Sir Frederick (1783-1870) Eng judge from 1844 to 1866 he was Chief Baron of the Exchequer received baronetcy in 1866
Pollack, Sir Frederick (born 1846) Eng jurist became professor of jurisprudence at University College London in 1882 and at Oxford in 1883 succeeded to baronetcy in 1888 his works include *Lectures in Jurisprudence* and *Ethics* Introduction to Political Science and Spinosa
Pollack, Sir George (1786-1872) Brit soldier in 1841 commanded the Afghan expedition became field marshal and Constable of the Tower made a baronet in 1872
Pollack, Walter Herries (born 1850) Eng author and journalist became editor of the *Saturday Review* in 1884 and published in collaboration with Su Walter Besant *The Ballad Maker* a play and other works
Polo, Marco (1254-1324) Venetian traveller went to Tartary with his father and uncle returning in 1295 Marco was afterwards made prisoner by the Genoese and wrote the history of his travels in Asia while in confinement
Polybius (c. 204-122 B.C.) Gk historian his chief work is a history of Greece and Rome from 220 B.C. to 146 B.C. only five of the forty books of the history are extant
Polyeup (c. 99-155) apostolic father and saint was by tradition a disciple of St John who appointed him Bishop of Smyrna suffered martyrdom under Marcus Aurelius
Polyclitus (5th cent B.C.) Gk sculptor his most famous productions were *The Doryphorus* and the colossal statue of *Hera* 1139
Polygnetus (5th cent B.C.) Gk painter came from Thasos to Athens where he left specimens of his work in the Propylaea and in the temple of Theseus
Pomel, Sébastien Joseph de Carvalho e Mello, Marques de (1699-1782) Port statesman became Foreign Sec in 1760 and Premier six years later
Pompadour, Jeanne Antoinette Pompon, Marquise de (1721-64) mistress of Louis XV appeared at Court in 1745 and ruled France until her death
Pompeius, Gnaeus (106-48 B.C.) Rom general known as Pompey the Great

conquered Syria and Judea after wards quarrelled with Caesar by whom he was defeated at Pharsalus 48 B.C., 1303
Poniatowski, Josef Anton Prince (1762-1813) Polish noble became marshal of Fr and was made War Minister by Napoleon in 1806
Ponsard, François (1814-67) Fr dramatist chief plays *Lucrèce* (1843) in which Rachel appeared *Le Honneur et l'Argent* (1853) and *Le Lion Amoureux* (1867)
Pools, Reginald Stuart (1832-95) Eng numismatist and orientalist entered the British Museum in 1852 and was appointed keeper of coins in 1870 in 1889 he became professor of archaeology at University College among his works are *Official Catalogue of Coins of Egypt* etc
Pope Alexander (1686-1744) Eng poet son of a linen draper began as a child to write verses made his reputation by the *Pessy on Criticism* (1711) he soon became the friend of Swift and other leading writers and produced *The Rape of the Lock* verse translations of the *Iliad* and *Odyssey* *The Dunciad* and the *Essay on Man* besides taking part in *Miscellanies* with Swift Arbuthnot and others
Poquelin, Jean Baptiste, Sr. Molière
Porphyry (233-306) Gk philosopher pupil of Plotinus whose life he wrote is also that of Pythagoras and Questions on Homer etc
Porpora, Niccolò (1686-1767) Neapolitan musician founder of the modern school of singing
Porson, Richard (1759-1808) Eng scholar son of a parish clerk at East Ruston Norfolk became professor of Greek at Cambridge in 1799 he published editions of *Aeschylus* several plays of Euripides and the *Lexicon of Photius*
Porta Giovanni della (1543-1615) Neapolitan physicist invented the camera obscura
Porter, David Dixon (1813-91) Amer admiral captured New Orleans in 1862
Porter, Jane (1776-1850) Eng writer author of *Thaddeus of Warsaw* and *The Scottish Chiefs* her sister Anna Maria (died 1842) wrote *The Hungarian Brother* etc
Porter, Noah (1811-92) Amer philosopher among his works are *The Human Intellect* (1863) *Elements of Intellectual Philosophy* (1871) *Elements of Moral Science* (1873)
Portland William Cavendish-Bentinck, 3rd Duke of (1738-1809) Brit politician Lord Lieutenant of Ire from 1782 till appointment as nominal head of Coalition Ministry from 1807 till his death was again Prime Minister
Potemkin, Gregory Alexandrovich (1739-91) Rus statesman favourite of the Tsarina Catherine II who made him prime minister greatly improved the Rus army and took the Crimea from Turkey
Potgieter, Everhardus Johannes (1808-75) Dutch poet and critic chiefly famous for his poem *Ilorenca* which appeared in 1865 translated many Eng novels into Dutch
Potter, Paul (1825-54) Dutch painter of cattle and landscapes his bull is at the Hague and Alderney Bull Cow and Calf in the National Gallery London
Pougatcheff, Cossack who claimed to be Peter III of Russia 1783, picture 1234
Pouillet, Claude Servais (1791-1868) Fr physicist who did much valuable research work invented the tangent and sine galvanometers
Poulton, Edward Bagnall (born 1856) Eng zoologist author of *The Colours of Animals their Meaning and Use* (1890) in addition to many monographs on this and kindred subjects
Pounds, Charles Courtenay (born 1862) Eng actor played in operas of Gilbert and Sullivan and achieved success as Ali Baba in the five years' run of *Che Chou Chou*
Pounds, John (1766-1834) Eng philologist founded Eng Ragged Schools

Poussin, Gaspard (Dughet) (1613-75) Fr landscape painter pupil and brother in law of Nicholas whose name he adopted several of his works are in the National Gallery London
Poussin, Nicholas (1594-1667) Fr painter many of his works including the famous *The Seven Sacraments* are in the National Gallery London and at Windsor
Powell, Frederick York (1850-1904) Eng historian renowned for his translations of ancient northern poetry one of the founders of the *English Historical Review*
Powers, Hiram (1807-73) Amer sculptor lived at Florence from 1837 till his death his chief production being *The Greek Slave* (1833)
Povynings, Sir Edward (1459-1521) Lord Deputy of Ireland (1494) and procured from the Parl of Drogheda (1495) the statute called *Povynings Act*
Poynter, Sir Edward John (1836-1919) Eng artist made a name by his *Israel in Egypt* (1868) the year after which he became A.R.A. became R.A. (1876) and pres of Royal Academy (1896) among his other pictures are *Atlantis a Race* (1878) and *A Visit to Ascalon* (1880)
Pozzo di Borgo Carlo Andrea Conte (1784-1841) Rus diplomatist born in Corsica organized coalition against Napoleon and came to Eng in 1814 long afterwards Rus ambassador there
Prad, Winthrop Mackworth (1802-33), Eng poet he entered Earl in 1830 but soon died of consumption a collection of his poems appeared in 1864
Praxiteles (fl. circa 400 B.C.) Gk sculptor a list of whose works is given by Pliney there is a copy of *Aphrodite Knidos* at the Vatican 1140
Preese, Sir William Henry (1834-1913) Welsh electrician chief engineer to General Post Office (1842-91) 4
Prezan General (born 1861) Rumanian soldier commanded Rumanian 3rd and 4th Armies in World War after which appointed Chief of Staff
Presscott, William Hocking (1774-1839) Amer historian in spite of very bad eyesight devoted himself to history and produced several historical classics
Pressensé Edmond de (1834-91) Fr Prot minister and author his wife wrote children's books and poems
Prester John, a mythical personage who was supposed to rule a kingdom in the East and to rule a Christian kingdom as king and priest
Preval, Sir Joseph (1812-98) Eng geologist was the first to establish the fact that man was contemporary with the extinct mammals was vice pres of the Royal Society (1870-71) author of several scientific works
Preterius Andreas (1793-183) founder of the *Ordnance Gazette* and the *Prussian Republic* gave his name to the town of Pretoria
Preterius Maritimus (1819-1901) son of Andrius Preterius Pres of the *Prussian* (1867-71) and one of the leaders in the Boer War of London (1890)
Prevost Eugene Marcel (born 1862) Fr novelist and playwright elected to Fr Academy in 1909
Prevost d'Exilles Antoine Abbé (1807-76) Fr writer among whose numerous works were *Mémoires d'un Homme de Quatre* and *Des Grands et des Petits*
Price, Bonamy (1807-88) Eng economist was appointed professor of political economy at Oxford in 1838 and published *Practical Political Economy* (1878) and some works on currency
Price, Richard (1733-91) Welsh Nonconformist writer his writings against the mer war and a sermon he preached on the Fr Revolution were attacked by Burke
Prichard James Cowles (1786-1848) Eng anthropologist his chief work *Researches into the Physical History of Man* (1813) was translated into most of the languages of Europe
Prichard, Thomas (died 1604) Eng regicide who signed the death warrant of Charles I
Prichard, Humphrey (1648-1744) Eng

divine became Dean of Norwich in 1702 his chief work was *The Connection of the Old and New Testament* (1715-17)

Pressat, Vincent (1799-1841) Ger doctor son of a Silesian farmer originated the water cure which was first tried on himself established baths at Grafenbourg

Priestley, Joseph (1733-1804) Eng natural philosopher gained the Copley medal in 1772 for his discoveries concerning the properties of fixed air and made important observations on respiration in 1791 his house at Birmingham was wrecked by a mob who disapproved his sympathy with the Fr Revolution

Primo, Juan (1814-70) Sp general he came governor of Madrid in 1843 and afterwards minister of war and public instruction in 1870 he was killed by a leftist assassin

Primrose, Neil James Archibald (1882-1917) Brit politician became Under Secy for Foreign Affairs in 1915 and Chief Whip in Cabinet 1916 was killed in action in Palestine

Primus, Gavril (1891-1918) the Russian who assassinated the Archduke Ferdinand at Sarajevo in June 1914 sentenced to 20 years penal servitude and died in prison

Prinzhorn, Nathanael (1821-94) Ger botanist founded the Ger Botanical Society (1882) and wrote several valuable books on botany

Prinsep, Valentine Cameron (1838-1904) Anglo Indian artist and author B A (1894) exhibited historical and other paintings and wrote novels and Imperial India a book of impressions

Priser, Matthew (1664-1711) Eng poet and diplomatist son of a London publican was employed to negotiate the Peace of Utrecht his poems were published by subscription and he was buried in Westminster Abbey

Prisselink (4th cent) Sp theologian whose opinions were condemned in 180 by the Council of Saragossa

Probus, Marcus Valerius (died 292) Rom Emperor elected by the army of the East in 276 gained some victories over the barbarians but was killed in a mutiny

Procopius (circa 490-565) Gk historian accompanied Belisarius as his secy in all his campaigns and wrote histories of the Persian, Vandal, and Gothic and Avarian Empires

Procter, Adelaide Ann (circa 1825-84) Eng poet daughter of Barry Cornwall author of *Legends and Lyrics* (1858-61) and *A Chapter of Verses* (1862)

Proctor, Richard Anthony (1837-88) Eng astronomer and popular scientific writer author of *Other Worlds than Ours* (1870) *Old and New Astronomy* etc and editor of *Knowledge*

Prodicus (fl circa 400 B.C.) Gk sophist teacher of Socrates was author of the fable of the Choice of Hercules

Propercius, Sextus (died circa 14 B.C.) Rom poet friend of Ovid and Virgil and author of *Levies* of which there are several translations

Protagoras (born circa 480 B.C.) Gk sophist was banished from Athens on a charge of Atheism none of his works is extant

Prothero, Sir George Walter (1848-1922) Eng historian one of the editors of *The Cambridge Modern History* and was made a fellow of the Brit Academy, knighted in 1920

Protagoras (fl circa 330 B.C.) Gk painter part of Rhodes where he lived is said to have been spared for his sake during the siege

Protopopoff, Alexander (died 1918) Rus statesman notorious for his pro Ger attitude during World War was executed by the Bolsheviks in Moscow

Proudhon, Pierre Joseph (1809-65) Fr writer, son of a Basançon cooper, author of works advocating anarchy for which he was prosecuted

Pross, Samuel (1783-1852) Eng artist was elected to the Water Colour Society in 1816 having become known for his country scenes his best picture is perhaps *The Indianman Ashore* (1819)

Prostatius, Marcus Aurelius Celsinus (born 348) Rom Christian poet was born in Sp author of a large number of hymns and lyrical pieces

Prynne, William (1600-69) Puritan lawyer and writer was imprisoned fined and pilloried by the Star Chamber for his *Historia Mastur* became keeper of the Tower records after the Restoration

Psalmanazar, George (circa 1679-1763) literary impostor born in Fr invented a language and published a history of Formosa of which he pretended to be a native

Ptolemy or Ptolemaeus Claudius (fl 127-51) Alexandrian writer author of the *Almagest* or *Syntax of Astronomy* also wrote a Geography which was for thirteen centuries the leading authority

Ptolemy I Soter (367-283 B.C.) King of Lk obtained Lk as his share of the dominions of Alexander the Great in 323 B.C. gained his surname by saving Rhodes when besieged by Demetrius

Ptolemy II Philadelphus (309-247 B.C.) youngest son and successor of Soter had a long and peaceful reign

Ptolemy V Epiphanes (210-181 B.C.) son of Ptolemy Philopater obtained the help of the Romans against Syria and Macedonia but lost the greater part of his foreign dominions

Ptolemy VI Philometor (181-145 B.C.) son and successor of preceding was taken prisoner restored by the Romans but was killed in battle near Antioch

Puccini, Giacomo (1858-1924) It composer amongst his famous operas are *La Bohème*, *La Tosca* and *Madama Butterfly*

Puffendorf, Samuel, Baron von (1632-94) Ger jurist and historian author of *De Jure Naturæ et Gentium* *Life of Gustavus of Sweden* etc

Pugot, Pierre (1622-94) Fr sculptor and architect whose Milo group and Andromedé are at Versailles

Pugin, Augustus Welby (1812-52) Eng architect son of a Fr immigrant who built St George's Southwark was chief promoter of the Gothic revival

Puleo, Luigi (1811-97) It poet friend of Torzoso de Medici and author of *Montate Maggiore* which was translated by Lord Byron in *The Job*

Pullman, George Mortimer (1831-97), Amer inventor of sleeping car 938

Pulteney, Sir William (born 1661) Eng soldier who has seen much distinguished active service knighted in 1913 and became gentleman usher of the black rod (1920)

Purcell, Henry (1658-96) Eng composer was appointed organist of Westminster Abbey at the age of 15 and was buried there

Purshas, Samuel (1757-1826) Eng divine compiled several histories and travels and was chaplain to Archbishop Abbot

Pusey, Edward Bouverie (1800-82) Eng theologian who took a leading part in the Oxford movement publishing *Scriptural Views of Holy Baptism* in 1835-36 was several times inhibited from preaching

Pushkin, Alexander Sergeyevitch (1799-1837) Rus poet whose first works were published when he was 15 earned great praise for his lyrics and poems and for his play *Boys' Games*

Puvion de Chavannes, Pierre (1824-98) Fr painter exhibited in the Salon of 1861 his pictures include *Scènes de la Vie de Ste Genevieve* (1873-78) executed for the Pantheon, and *Pro Patrie Ludus* (1882)

Pyn, Henry James (1746-1813) Eng poet was appointed laureate in 1790, his Poems being published in 1787

Pynn, John (1584-1643) Eng lawyer and politician took a leading part in the impeachment of Buckingham, and conducted the proceedings against Strafford in the Long Parl was buried in Westminster Abbey the whole House of Commons attending the funeral

Pynnon, Richard (died 1640?), Eng printer 698

Pyrrhus (circa 318-272 B.C.), king of Epirus fought against the Romans and twice

mastered Macedonia but was killed by a tide in a night attack on Argos

Pythagoras (died circa 500 B.C.) Gk philosopher who exercised so much influence as an opponent of democracy that his followers were exposed to persecution and exile his doctrine of the Kosmos was the beginning of physical science

Pythes (fl circa 300 B.C.), traveller, who made several voyages of exploration, and is said to have reached Northern Britain (Ultima Thule)

Quain, Sir Richard, Bart., FRS (1816-98) Ir medical practitioner edited the *Dictionary of Medicine* (1882) for which he wrote some valuable articles

Quarles, Francis (1592-1644) Eng poet; his chief work is *Emblems* consisting of poems accompanied by allegorical designs which they interpret

Quatrefages de Bréau, Jean Louis Armand de (1810-92) Fr naturalist became professor of anthropology in the Museum of Natural History at Paris (1855); published numerous works

Quennay, François (1694-1774) Fr physiologist and economist in his *Physiocratie* (1768) he advances the theory that as the means of subsistence are derived from the land agriculture is the only productive industry

Quenel, François (1634-1719) Fr theologian born in Paris was accused of holding Jansenist views and forced to withdraw to Brussels and afterwards to Amsterdam where he died

Quevedo y Villegas, Francisco Gomez de (1580-1645) Sp writer excelled in satire chief work is his *Viajones*, also wrote lyrical poems dissertations, etc

Quiller-Couch, Sir Arthur Thomas (born 1863) Eng novelist and critic his many famous novels were written under the pseudonym Q. knighted (1910).

Qwan, James (1893-1968) Eng actor, recognized as the greatest living tragedian till Garrick became his rival, was a friend of the poet Thomson

Quinet, Edgar (1803-75) Fr writer, became professor of foreign literature at Paris (1841) among his works are *Ahyuerus* an allegory (1843) and *La Genie des Religions* (1848)

Quintana, Manuel José (1772-1837), Sp. lyrical poet writer of warlike verses, he attacked the Fr in his *Semanario Patriótico* and was imprisoned after the return of Ferdinand (1813-20)

Quintilianus, Marcus Fabius (circa 35-90), Sp rhetorician who settled in Rome, where he became a teacher of eloquence, among his pupils was the younger Pliny

R

Rabelais, François (circa 1483-1553) Fr humorist and satirist was at first a friar but afterwards studied medicine at Montpellier, the first book of the *History of Gargantua* appeared in 1533

Rachel (1821-58) Swiss actress of Jewish descent real name Eliza Rachel Felix, as a child she sang for bread in the streets of Lyons rose to be the unrivalled exponent of the classical school

Rachmaninov, Sergius Vassilievitch (born 1873) Rus composer his works include piano concertos orchestral symphonies, songs and operas, his prelude in C sharp minor (Op 3) being exceptionally popular

Racine, Jean (1639-69), Fr dramatist, 1598

Radcliffe, Ann (1764-1823), Eng novelist, wrote several wild romances of which the *Mysteries of Udolpho* (1794) is the most celebrated

Radcliffe, John (1650-1714), Eng physician; became physician to the Princess Anne, afterwards queen (1688) left £40 000 for building the library at Oxford which bears his name

Radezky, Johann Joseph Wenzel, Count of Radetz (1766-1858), Austrian field-marshal suppressed the insurrection in Lombardy (1848-49)

Rae, John (1813-93) Scot Arctic explorer in 1846-47 discovered 700 miles of coast between Boothia and Fury and Hecla Strait commanded expedition in search of Franklin (1849)

Raeburn, Sir Henry (1756-1823) Scot portrait painter among his best portraits are those of Sir Walter Scott Lord Eldon and Francis Jeffrey, became B.A. (1815)

Raffles, Sir Thomas Stamford (1781-1826) Brit administrator, founder of Singapore advised the attack on Java (1811) and became governor on its annexation was one of the founders and first pres of the Zoological Soc of London

Raglan, Fitzroy James Henry Somerset, Baron (1788-1843) Brit field marshal military sec to Wellington at the battle of Waterloo on the outbreak of the Crimean war was appointed commander of the Eng forces and displayed great personal bravery at the Alma 227

Raikes, Robert (1786-1811) Eng printer and newspaper proprietor born at Gloucester helped to establish the first Sunday schools (1781)

Ramond, Marc Antoine (1746-1834) It engraver at Venice he copied the works of Durer with so much accuracy that they were mistaken for the originals employed at Rome by Raphael to engrave his paintings

Raleigh, Sir Walter (1552-1618) Eng soldier sailor, and historian 1213

Ramsay, Allan (1686-1788) Scot poet published a collection of his own poems (1721) and was the author of some of the songs in the Tea Table Miscellany (1724-40) his pastoral drama *The Gentle Shepherd* was published in 1725

Ramsay, Sir William (1803-1916) Brit chemist professor of chemistry at University College, London (1887-1912) knighted in 1902 and received Nobel prize for chemistry (1904) picture 393

Ramsay, Sir William Mitchell (born 1851) Brit archaeologist was professor of humanity at Aberdeen (1886-1911) published many works dealing with his discoveries

Ramus, Peter (Pierre de la Ramée) (1515-72) Fr philosopher his attacks on the Aristotelians subjected him to much persecution, finished in the massacre of St. Bartholomew

Ranjit Singh, Maharaja (1780-1839) chief tain of the Sikhs captured Lahore (1799) and Amritsar (1802) his authority was curbed by treaty with Britain

Ranke, Leopold von (1795-1886) Ger historian in 1841 became royal historiographer among his chief works are the *History of the Popes* (1834-37) and the *History of Germany* during the Reformation (1839-47)

Raphael (Raffaello Sanzio, or Sansio) (1483-1520) It painter, 549

Rapin de Thoyras, Paul de (1681-1725) Fr historian accompanied William III to Eng and served under him in Ire noted for his *Histoire d'Angleterre*

Rasputin, Gregory (1878-1916), Rus impostor and fanatic exerted a sinister influence at the Rus court, assumed the name Rasputin (The Immoral), his real name being Novikh, was assassinated in Petrograd

Rauch, Christian Daniel (1777-1857), Ger sculptor his masterpiece is the equestrian statue of Frederick the Great in Berlin

Raumer, Friedrich Ludwig Georg von (1781-1878) Ger historian was professor at Berlin (1819-47), his chief work is a *History of the Hohenstaufen and their Times* (1823-25)

Rawlinson, George (1812-1902) Brit historian Canon of Canterbury, was appointed Camden professor of ancient history at Oxford (1861), his chief work was his edition of *Herodotus* (1858-62)

Rawlinson, Sir Henry Creswell, Bart (1810-95), Brit soldier, was political agent at Kandahar and afterwards vice pres of the Council of India published several works on cuneiform inscriptions

Rawlinson, Henry Seymour, Baron (1864-1925), Brit soldier, after distinguished

service in India and Eg he was given staff appointment in South African war was Director of Recruiting at outbreak of World War but was soon sent to Fr where he saw much service particularly in the 13re region commanded the Fourth Army (1915-18) conducted the Somme offensive in 1916 and took a leading part in the final operations died in India where from 1920 he was commander in chief

Ray, or Wray, John (1627-1705) Eng naturalist travelled on the Continent with Francis Willughby and in 1673 published an account of the expedition wrote numerous books on his nature studies, Ray Soc founded in his honour

Rayleigh, John William Strutt, Lord (1842-1919) Eng physicist was professor of natural philosophy in the Royal Institution (1887-1905) became pres of the Roy Soc and Chancellor of Cambridge Univ received the Nobel prize for Physics (1904)

Reade, Charles (1814-84) Eng novelist and dramatist among his novels most of which were intended to expose some social abuse were *It is Never Too Late to Mend* (1856) and *The Cloister and the Hearth* (1861) 80

Reading, Rufus Daniel Isaacs, 1st Earl of (born 1860) Brit lawyer and administrator Lord Chief Justice (1913) previously Solicitor General and Attorney General made an earl in 1917, and appointed Viceroy of India (1921)

Reaumur, René Antoine Ferchault de (1683-1757) Fr physicist was the first to reduce thermometers to a common standard

Reaumur, Jeanne Françoise Bernard (1777-1849) Fr politician between the Bourbon restoration and her death her salon at Abbaye aux Bois was the resort of men of rank and genius

Redmond, John Edward (1851-1918) Ir nationalist leader and politician enlisted considerable sympathy for his country's aspirations and was actively engaged in the long struggle for Home Rule supported Brit on the outbreak of war in 1914 but lost power in Ir following the growth of Sinn Féin party who did not favour his conciliatory and constitutional methods

Reeve, John Sims (1818-1900) Eng tenor singer joined Macready's company at Drury Lane (1841) had remarkably successful career

Regault, Henri Victor (1810-78) Fr chemist his most valuable experiments relate to the specific heat of gases

Regulus, Marcus Atilius (died 281 B.C.) Rom general was sent against Carthage and gained some successes but was afterwards taken prisoner was put to death by the Carthaginians

Reid, Sir George (1845-1918) Australian statesman became Premier of the Commonwealth Parl (1904) came to London in 1909 as High Commissioner and afterwards entered Brit Parl

Reid, Thomas Mayne (1818-83) Ir novelist entered the U.S. army and distinguished himself in the Mexican war wrote *The Scalp Hunters* (1847) *The Rifle Rangers* (1850), *The Headless Horseman* (1865) etc

Reid, Thomas (1710-96) Scot metaphysician, was Professor of Philosophy at Glasgow (1753-96) wrote *Inquiry into the Human Mind on the Principles of Common Sense* (1764)

Reid, Whitelaw (1837-1913) Amer journalist became editor of the *New York Tribune* (1872) was ambassador to Gr Brit from 1895 until his death in London (1912)

Reinhardt van Nyn (1806-69) Dutch painter and engraver was the son of a miller and studied for three years under Jacob van Swanenborch afterwards the pupil of Peter Lastman at Amsterdam and of Jacob Pinas at Haarlem in 1830 he settled in Amsterdam where he died among his chief works are *The Anatomy Lesson* (1683) *The Night Watch* (1642) and *Syndics of the Guild of Drapers* (1661)

Renan, Joseph Ernest (1823-92), Fr orientalist, historian, and essayist,

first important work *Averroës et l'Averroïsme* appeared (1829) other works include *Vie de Jésus* and *La Judéisme*

Renard, Charles, captain in the Fr army pioneer of flying 228

Renou, John (1761-1821) Brit engineer built Waterloo Bridge London designed London Bridge and constructed several canals 845, 846

Renou, Sir John (1794-1874) Brit civil engineer engineer to the Admiralty among his chief works are the Whitehaven docks and a portion of the Cardiff docks in many of his enterprises he was associated with his brother George (1791-1868)

Reis, Jean François Paul de Gondi, Cardinal de (1614-79) took a leading part in the plots against Mazarin and on the outbreak of the war of the Fronde (1648) put himself at the head of the insurgents his Memoires give a valuable account of the chief political characters of the period

Reuter, Paul Julius Baron (1817-99) in 1848 established an office at Aix la Chapelle for supplying news by pigeon post subsequently revolutionized the press of Europe in 1851 he transferred his business to London

Reynolds, Sir Joshua (1723-92) Eng portrait painter 1478

Rhodes, Cecil John (1853-1902) Brit African lawyer and statesman 88

Rhonda, David Alfred Thomas, Viscount (1846-1918) Brit business man and politician had important coal mining interests in Wales, appointed Privy Council Government Board in 1916 and Lord Controller in 1917 raised to peer 14 (1916)

Rhonda, Margaret Haig, Lady (born 1883), daughter of the peerage, succeeded to the title on death of Viscount Rhonda's many of whose business interests she required

Ribot, Alexandre Félix Joseph (born 1842) Ir statesman Irish Minister on four occasions

Ricardo, David (1772-1823) Brit political economist son of a Jewish broker entered Parl (1819) published *Principles of Political Economy and Taxation* containing his famous theory of economic rent (1817)

Rice, Abner Hogen (born 1870) Amer novelist author of *Mrs Wiggs of the Village* 141

Richard I (1157-99) King of Eng known as *Lion de Lion* was the 3rd son of Henry II whom he succeeded (1189) joined the 3rd Crusade in company with Philip Augustus of Fr proceeded to Sicily where he remained till April 1191 when he sailed to Palestine taking during the journey to Cyprus which he could not finally abandoned the project of taking Jerusalem and in October 1192 he set sail for Eng was captured and imprisoned by Emperor Henry VI who released him only on the payment of a heavy ransom (1194) was mortally wounded while besieging the castle of Châlus

Richard II (1367-1400) King of Eng son of Edward the Black Prince succeeded his grandfather Edward III (1377) after Wat Tyler's rebellion and the execution of Dr. Vete and Suffolk Richard assumed the govt and for eight years ruled well during his absence in Fr Henry Duke of Lancaster son of John of Gaunt landed in Yorkshire and Richard was taken prisoner resigned the crown in favour of Henry who had to be murdered

Richard III (1452-85) King of Eng youngest son of Richard Duke of York fought at Barnet and Tewkesbury (1471) and in 1482 led an expedition against Scot after the death of his brother Edward IV he was proclaimed Protector (May 1483) formed a plot in concert with the Duke of Buckingham which led to the execution of Lord Hastings and the imprisonment of the King's nephews, Edward V and his brother in the Tower afterwards declaring himself King the same year the young prince disappeared and Buckingham, who had excited a rising

in favour of Edward V was executed defeated and slain at Bosworth
Richardson, Sir Benjamin Ward (1829-96) Eng scientist and surgeon published *Alcohol its Action and its Use* (1869) *Hygiene* (1876) etc
Richardson, Samuel (1689-1761) Eng novelist wrote first work when 50 years old his novels are *Pamela* (1740) (*Larissa Harlowe* (1748) and *Sir Charles Grandison* (1753)
Richelieu, Armand Jean du Pleiss, Cardinal (1585-1642) Fr statesman was exiled to Avignon (1618) but was soon afterwards recalled and received a cardinal's hat as chief minister he established the absolute power of the king and crushed the Calvinist party
Richmond, Sir William Blake (1841-1921) Eng portrait painter, painted portraits of Darwin (1880), Gladstone and Browning (1882)
Richmond and Gordon, Charles Henry Gordon-Lennox, 6th Duke of (1818-1903) Brit politician 1st of the House of Lords (1847-68) led the Government in the House of Lords (1874-77) and was Secretary for Scot under Lord Salisbury (1885-86)
Reber, Hans (1943-1916) Hungarian musical conductor became Kapellmeister at Vienna (1878) subsequently removed to London
Recher, Johann Paul Friedrich (1763-1823) Ger novelist and humorist noted chiefly for his *Pflan* (1799-1802) wrote also *Hesperus* and *Ilvana*
Ruddell, George Allardice, 1st Baron (born 1865) Brit newspaper proprietor has interests in the *News of the World* *George News* 1st and *C. Arthur Pearson Ltd* raised to peerage (1900)
Rudge, William Pitt (born 1864) Eng novelist and humorist has published many popular works including *The Wickhammers* *Mord Faily* and *The Hunting Hours*
Ridley, Nicholas (1500?-55) Eng reformer who was appointed Bishop of London in 1530 and took a leading part in composing the liturgy condemned to death for heresy and burnt with Latimer (1555)
Romano, Cola di (1313-54) Rom citizen taken to schism for a revival of the ancient republic and was in 1347 proclaimed tribune remained for some time a prisoner in the hands of Clement VI on the election of Innocent VI (1353) he was released and went to Rome a governor his conflicts caused him to be assassinated (1354)
Ripon, Frederick Robinson, 1st Earl of (1793-1851) Brit statesman son of the 1st Earl Grantham after being Chancellor of the Exchequer he became Prime Minister (1827-30) Colonial Secretary under Earl Grey (1830-33) and Lord Privy Seal (1833-34)
Ripon, George Frederick Samuel Robinson, 1st Marquis of (1827-1909) Brit statesman Lord Privy Seal (1866-67) Lord of the Admiralty in 1896 and Colonial Secretary (1892-93) in 1900 he became Liberal leader in the House of Lords
Riviera, Briton (1840-1920) Eng artist born in London has exhibited at the Academy many works depicting animal life B & (1981)
Rusio, David (1633?-66) It musician who went to Scot and became secretary of Mary Queen of Scots, his influence over her excited jealousy, and he was murdered by Darnley
Robert I (died 1033) Duke of Normandy the Magnificent, succeeded his brother Richard III (1026), unsuccessfully invaded Eng
Robert II (1064?-1134) Duke of Normandy, succeeded his father William the Conqueror (1067) invaded Eng (1101) defeated by Henry at Ichenham (1106) and imprisoned in Cardiff Castle where he died
Robert Bruce See Bruce, Robert
Robert II (1216-90), king of Scot acted as regent during the minority of David Bruce, and again during his captivity in Eng (1246-57), was chosen king in 1270

Robert III (1406-1460) king of Scot succeeded his father Robert II (1390) died of grief at the capture of his son James by the English
Roberts of Kandahar, Frederick Slough, Earl (1832-1914) Brit soldier 205
Robertson, Frederick William (1816-53) Eng divine whose sermons published after his death attained a great and lasting popularity
Robertson, Thomas William (1829-71) Eng dramatist, wrote *David Garrick* (1864) *Society* (1865) *Ours* (1866) (*ais* (1867) etc, 1084, 1085
Robertson, William (1721-93) Scot historian became principal of Edinburgh Univ in 1762 and in 1764 was made royal historiographer for Scot his chief works are histories of Scotland (1759) Charles V (1769) and America (1777)
Robertson, Sir William Robert (born 1860) Brit soldier rose from the ranks to fill-murder being the only man to have accomplished this appointed Chief of the Imperial General Staff in 1915 and directed Brit military operations during World War commander in chief of Brit army on the Rhine (1919-20) promoted to rank of field-marshal (1920)
Robespierre, Maximilien Marie Isidore (1758-94) Fr revolutionist who became a leader of the party of the Mountain which finally triumphed over that of the Girondists (May 1793) the Reign of Terror followed and he exercised the power of a dictator tyranny at it excited a party against him in the Convention and he was guillotined he was a fanatic but sincere
Robinson Henry Craik (1773-1867) Eng journalist and diarist friend of Lamé Wordsworth Coleridge and Southey (*Library* *Reminiscences*, Cor-respondence, 3) 572
Rockefeller, John Davison (born 1839) Amer capitalist founder of Standard Oil Co 771
Rockingham, Charles Watson-Wentworth 2nd Marquis of (1730-82) Brit politician was Prime Minister and first Lord of the Treasury (1765-66) and repealed the Stamp Act in the latter year again became Treasurer (1781)
Rodan Augustus (1840-1917) Fr sculptor 801
Rodney George Brydges, 1st Baron (1719-92) Brit sailor who saw much distinguished service defeated the Sp fleet at Cape St Vincent (1780) and the Fr off Martinique (1782)
Roebuck, John Arthur (1801-79) Brit politician overthrew the Aberdeen Ministry by his motion for an inquiry into the condition of the army in the Crimea his Radical views afterwards underwent a great change
Rogers, James Edwin Thorold (1823-90) Eng political economist noted for his *History of Agriculture and Prices in England* (1866) entered Parli (1860)
Rogers, Samuel (1763-1855) Eng poet his chief work was *The Pleasures of Memory* (1792) is now better remembered as a leader of society and a patron of art and literature than as a poet
Rohan, Louis René Edouard, Prince de (1734-1803) Fr cardinal Bishop of Strasbourg (1779), was implicated in the Diamond necklace affair and was imprisoned in the Bastille (1785) but released (1786)
Roland de la Platière, Jean Marie (1734-94) Fr revolutionist was minister of the interior (1792) but lost influence with the Girondists and resigned fled from Paris and committed suicide near Rouen
Roland, Marie Jeanne Philopon (1764-93) wife of the preceding exercised much influence over the policy of the Girondist party on the proscription of the Girondists she was put to death her *Mémoires* were written during her imprisonment in the Abbaye
Rollin, Charles (1681-1741) Fr historian twice became rector of the Univ of Paris, wrote an *Ancient History* and an uncompleted *Roman History*

Rolls, Charles Stewart (1877-1910) Eng engineer and airman founded Rolls Royce Motor Co was killed while flying at Bournemouth
Romana, George John (1848-94) Brit scientist born in Canada published *The Star fish Jelly fish and Sea Urchins* (1885) *Mental evolution in Animals* (1883) Darwin and after Darwin (1892-97) and *Essays* (1897)
Romilly, Sir Samuel (1757-1818) Eng lawyer descended from a Fr Huguenot made a special study of criminal law and as Solicitor General, he effected important reforms
Romney, George (1734-1802) Eng portrait painter 1083
Ronald, Sir London (born 1879) Brit musician and orchestral conductor appointed Principal of Guildhall School of Music (1910) composed numerous songs and incidental stage music knighted (1922)
Ronsard, Pierre de (1524-85) Fr poet his works consist chiefly of odes elegies and epigrams
Röntgen, Wilhelm Konrad (1845-1923) Ger physicist 1162
Roche, Sir George (1650-1709) Eng admiral destroyed Fr fleet at La Hogue (1692) in 1702 destroyed the Franco Sp fleet including treasure ships in the harbour of Vigo
Roosevelt, Theodore (1858-1919), 26th pres of U S 4 115
Root, Elihu (born 1845) Amer statesman Sec of State under Roosevelt his ardent work in the cause of peace was rewarded by the Nobel Prize (1912)
Ross, Carl August Nicolas (1842-89) Ger operatic manager founder of the Carl Rosa Opera Company (1875)
Ross, Salvador (1615-78) It painter reproduced the wild scenery of the Apennines in his landscapes his share in Masaccio's revolution compelled him to quit Naples (1647)
Roscoe, Sir Henry Knolly (1833-1915) Eng chemist joint author with Professor Benson of *Handbook of Gasometry* (1857) and published *Elementary Lessons in Chemistry* knighted (1884)
Roscoe, William (1753-1821) Eng his travel biographer published *The Life of Lorenzo de Medici* (1796) and *The Life and Intimate of Leo X* (1805) etc
Rosbery, Archibald Philip Primrose, 5th Earl of (born 1847) 1st Chairman of the LCC Foreign Sec under Mr Gladstone in 1886 and 1892 and Prime Minister (1894-95) a brilliant writer and orator
Ross, Sir James Clark (1800-62) Brit admiral served in the naval expedition for the discovery of the North West Passage (1818-33) discovered the north magnetic pole (1831) commanded the expedition of the *Erebus and Terror* to the Antarctic regions (1839-43)
Ross, Sir John (1777-1856) Brit admiral commanded an expedition in search of a North West Passage (1818) was again employed on an Arctic voyage of discovery (1829-38), in 1830 vainly endeavoured to find Sir John Franklin
Ross, Sir Ronald (born 1867) Eng physician made great contributions to science in connection with the problems of malaria awarded Nobel Prize for medicine (1902)
Rosse, William Parsons, Earl of (1800-67), Eng astronomer constructed many reflecting telescopes
Rosseth, Christina Georgina (1830-94) Eng poet, sister of D G Rossetti first works were printed when she was seventeen, *Goblin Market* *A Pageant*, *Sing Song* 465, 474
Rosseth, Dante Gabriel (1828-82) Eng poet and painter, 465, 474, 1461, 1483, 1485
Rossini, Gioachino Antonio (1792-1868) It opera composer among his chief operas are *The Barber of Seville* (1816) and *William Tell* (1829) also composed a *Sabat Water* (1842) and other Church music
Rostand, Edmund (1868-1918) Fr poet and dramatist apart from his famous *Cyrano de Bergerac* his works in-

cluded *La Princesse Lothaire, L'Anglon, et Le Chancelier*
Rothemann, Harold Harmsworth, Lord (born 1868) Brit newspaper proprietor younger brother of Lord Northcliffe has interests in the *Daily Mail Weekly Dispatch Daily Mirror Sunday Pictorial Evening News and Evening Standard* etc was Air Minister (1917-18) 1448, 1550
Rothschild, Anselm Mayer (1778-1855) eldest son of first Rothschild 1111
Rothschild, Lionel (1808-79) son of Nathan Rothschild 1118
Rothschild, Baron Lionel de (born 1868) eldest son of Nathan Mayer Rothschild 1114
Rothschild, Mayer Anselm (1743-1812) Ger merchant and moneylender 1109
Rothschild, Nathan Mayer (1777-1836) 3rd son of first Rothschild 1109
Roubille, Louis François (1695-1782) Fr sculptor settled in Eng about 1744 works include statues of Handel and Shakespeare
Rousseau, Jean Jacques (1712-78) Fr philosopher was apprenticed to an engraver gained a prize by an essay attacking the influence of the arts and sciences on society (1750) of his subsequent writings the following are the most famous—*Julie ou la Nouvelle Héloïse* a romance (1759) *Du Contrat Social* (1762) and *Emile* a philosophical romance treating of education (1762)
Rosa, Nicholas (1674-1718) Eng dramatist wrote *Jane Shore The Fair Penitent* and other tragedies, and translated *Jucanus Pharsalia* poet laureate (1715)
Rowlandson, Thomas (1766-1827) Eng artist chiefly remembered as a powerful caricaturist and for his illustrations to *Doctor Syntax's Three Tours* (1813) etc
Rowton, Montague William Lowry-Corry, Baron (1838 1903) Eng politician who was sec to Disraeli founded the dwelling houses for men that bear his name (1892)
Rubens, Peter Paul (1577-1640) Flemish painter in 1620 he adorned the walls of the Luxembourg with pictures illustrating scenes in the life of Marie de Medici the Descent from the Cross at Antwerp is considered his master piece
Rubinstein, Anton Gregor (1829 94) Russian pianist and composer studied under Liszt at Paris became principal of the St Petersburg Conservatoire (1862) visited Eng on eight occasions
Rudolf, or Rodolf I (1218 91) King of Ger founder of the Hapsburg dynasty was elected Emperor (1273) and ended the feud with the Pope curbed the power of the nobles and granted charters to many towns
Rudolf II (1552 1612) King of Ger was elected King of the Romans (1575) and succeeded his father Maximilian II as emperor (1576) caused great discontent by imposing heavy taxes and attempting to repress the Protestants
Rudyard, John, Eng lighthouse builder 255
Rumford, Benjamin Thompson, Count (1753-1814) Amer man of science fought on the Royalist side during the War of Independence became Minister of War in Bavaria (1784)
Rummen, Sir Walter, Earl (born 1847) Eng shipowner, 689
Rummen, Walter (born 1870) Brit politician eldest son of foregoer entered Parl (1899), Pres of Board of Education (1906-11), Pres of Board of Agriculture (1911-14) and Pres of Board of Trade (1914-16)
Rupert, Prince (1619 82) 3rd son of Frederick King of Bohemia and Elizabeth daughter of James I served in the Royalist army during the Civil War and distinguished himself by his impetuous courage afterwards rendered great services as a naval commander against the Dutch 124, 125
Ruse (died 879) the semi mythical founder of the Rus empire said to have crossed the Baltic from Scandinavia at the invitation of the Slavonians or Finns

Ruskin, John (1819-1900) Eng writer art critic and social reformer 1341
Russell, John, 1st Earl (1792-1878) Brit statesman who became an advocate of parl reform after holding several govt posts and introducing much necessary legislation he became Prime Minister (1846-52 and 1856-66) resigned on the defeat of his Reform Bill (1866) published an *Essay on the History of the English Government and Constitution* (1823) and numerous other works
Russell, William, Lord (1839-83) Eng politician leader of the Whig Opposition to Charles II was charged with complicity in the Rye House Plot and executed in Lincoln's Inn Fields
Russell, William Clark (1844-1911) Eng author published *The Wreck of the Grovener* and other nautical novels
Russell, Sir William Howard (1821 1907) Irish journalist was for many years war correspondent of *The Times* his letters during Crimean War created great consternation in Gt Brit and caused the fall of the Aberdeen ministry
Russell of Killowen, Charles, Baron (1832-1900) Brit politician and lawyer Attorney General in 1886 and 1892 94 in the latter year he became Lord Chief Justice and is regarded as one of the most brilliant advocates and judges of all time
Rutherford, Sir Ernest (born 1871) Brit physicist whose brilliant scientific research work brought him the Nobel Prize for Chemistry (1908) his Radio activity (1904) was followed by other valuable works
Rudland, John James Robert Manners, Duke of (1818 1908) Brit politician a leading member of the Conservative party who distinguished himself especially by his zeal in the agric interest was Postmaster General (1874 80 and 1885-87)
Ruyter, Michael Adriaanszoon de (1607 76) Dutch admiral for long a thorn in the side of the Eng navy one of his most daring exploits was his appearance in the Thames when he burned a number of Eng ships 126
Ryder, Thomas (1641 1713) Eng antiquary was appointed royal historical grapher (1692) edited *Foedera* consisting of the state documents concerning the relations of Eng with foreign states
Sabatini, Rafael (born 1874) Brit author and dramatist wrote *The Sea Hawk* and other popular tales also *Life of Cesare Borgia* 1012
Saatchi, Henry (1674? 1724) Eng clergyman was implicated in 1710 for some High Tory sermons preached at St Paul's the lightness of his sentence was regarded as a triumph by his party
Sachs, Hans (1484 1576) greatest of the Ger mastersingers by trade a shoe maker of Nuremberg composed many poems of merit
Sachs, Julius van (1832-97) Ger botanist his works include a *Compendium of Botany* a *History of Botany* and *Lectures on the Physiology of Plants* all of which have been translated
Sackville, George, 1st Viscount (1716 85) Eng soldier and statesman after distinguished military service he was dismissed for his disobedience to orders at Minden raised to the peerage (1782) took the name of German (1770)
Saint, Antoine Louis, Baron Sylvestre de (1758 1838) Fr Orientalist one of the founders of the Société Asiatique published *Principes de Grammaire Générale* *Exposé de la Religion des Druzes* etc
Sadler, or Sadler, Sir Ralph (1507 87) Eng statesman much employed in Scot under Henry VIII and his successors owed his rise to Thomas Cromwell
Sagasta, Francisco Mateo (1827 1903) Sp statesman was for some years a fugitive on account of being implicated in the rising of 1856 on his return he changed his views and was five times Prime Minister

St Aldwyn, Michael Edward Haiku-Besah (1837-1916), Brit politician entered Parl (1864) he was Chancellor of the Exchequer in Lord Salisbury's Gov (1885) and leader of the House of Commons after temporary retirement he became Pres of the Board of Trade (1888) and Chancellor of the Exchequer (1895) raised to peerage (1906) made earl (1916)
Saint Arnaud, Jacques Laroche de (1798-1854) Fr marshal having previously distinguished himself in Algeria became Minister of War (1851) carried out the coup d'état of December which placed Napoleon III on the throne
Saint-Beuve, Charles Augustin (1804-69) Fr critic after having been a surgeon wrote verses for several periodicals and in 1810 became Museum librarian was one of the editors of the *Dictionnaire Historique de la Langue Française*
Saint-Evremont, Charles de St Denis de (1610 1703) Fr soldier and writer fought on the Royalist side during the Fronde wrote *Reflexions sur la Tragédie et la Comédie*
Saint-Gaudens, Augustus (1848-1907) Amer sculptor most important productions are a statue of Lincoln at Chicago and busts of T D Woolsey and General Sherman
Saints, pen name of Xavier Boniface (1798-1864) author of *Piccolini* and other stories as well as of poems and some plays written in collaboration with Scribe
Saint-Just, Antoine (1767 94) Fr revolutionist chief supporter of Robespierre notorious for his severity as delegate to the army in Alsace
Saint Lambert, Jean François de (1718 1803) Fr poet contributor to the *Encyclopédie* his chief works are *Contes Orientales* and *Les Saisons*
Saint-Pierre, Jacques Bernardin de (1737-1814) Fr author wrote *Paul et Virginie* (1789)
Saint-Saëns, Charles Camille (1835 1921) Fr composer his chief works were *Samson et Dalila* (1877) *Étienne Marcel* (1879) and *Roi et Ombre*
Saintsbury, George Bateman (born 1845) Eng writer published *A Primer of French Literature* *A Short History of English Literature* *History of English Prose* *The English Novel* etc
Saint-Simon, Claude Henri de Rouvroy, Comte de (1760 1825) socialist writer author of *De la Réorganisation de la Société Européenne* *Catéchisme des Industriels* etc
Saint-Simon, Louis de Rouvroy Duc de (1776 1755) Fr soldier and diplomatist went to Sp (1771) to negotiate a marriage between Louis XV and the Infanta his *Mémoires* were a valuable work
St Vincent John Jervis, Earl (175 1823) Brit admiral joined his title from his victory over the French (1797) became 1st Lord of the Admiralty (1801)
Sale, George Augustus Henry (1733 94) Eng journalist was for many years war correspondent of the *Daily Telegraph* among his numerous works were *Twice Round the Clock* and *The Strange Adventures of Captain Dangerous*
Saladin (1137-93) Sultan of Egypt and Syria after conquering Syria invaded Palestine (1177) defeated the Crusaders at Hattin and took Jerusalem
Salandra, Antonio (born 1853) Italian statesman after occupying several ministerial posts became Prime Minister (1914-17) a position he held when Italy joined the Allies in the Great War
Salar Jung, Sir (1829 '83) Indian statesman—Prime Minister of Nizam (1858) supported the Eng during the Mutiny
Salazar Oliveira e Daun, José Carlos, Duke of (1791 1876) Port statesman Foreign Minister (1825) and as Governor of Oporto strongly opposed Dom Miguel was exiled following the latter's insurrections but returned and was again several times minister
Sala, George (c. 1697 1736) Eng Orientalist author of a translation of the Koran
Sala, Sir Robert Henry (1782-1845), Brit

general after distinguished services in India and the Mauritius was severely wounded in the Afghan expedition was besieged for five months in Jalaalabad (1841-42) and mortally wounded at Moodkee when quartermaster general to the army of the Sutlej.

Salisbury, Frank O. (born 1874) Brit painter whose pictures have frequently been exhibited at the Royal Academy his *Catharine of Aragon* is considered one of his best works.

Salisbury, Robert Arthur Talbot Gascoyne-Cecil Marquis of (1830-1903) Brit statesman entered Parl. (1853) was twice Sec for India (1886-87) and (1874-78) as Foreign Minister accompanied Lord Beaconsfield to the Berlin conference (1878) became conservative leader (1885) Premier (1885-86 1886-92 1895-1902).

Salisbury, Robert Cecil, Earl of (died 1914) Eng statesman son of Lord Burghley to whose position he succeeded and retained office under three I.

Salustianus Crispus, Gaius (Salustius) (86 B.C. 44 B.C.) Rom historian made fortune as governor of Numidia and wrote in retirement his *Jugurtha* and *Catilina*.

Salmausius or Claude de Saumaise (1584-1633) Fr scholar author of *Dictionnaire Regio pro (arols)* which was replied to by Milton in his *Defense of the People of England*.

Salmond, Sir John Maclean (born 1881) Brit soldier and aviator was appointed Director General of Military Aeronautics (1917) Chief of the Brit Air Force in 1918 and Commander of Air Force in Iraq (1920) became Air Marshal (1923).

Salt, Sir Titus, Bart (1803-76) philanthropist acquired a large fortune as a wool spinner and built the model village of Saltaire.

Salvini, Tommaso (1823-1915) It tragedian was best known in Eng. by his *Othello* which he played in 1878-79 and 1884 when he also played Hamlet in 1868 (acted in extraordinary imprisonment in Madrid as Conrad).

Sambourne, Edward Lanley (1844-1910) Eng caricaturist cartoonist to *Punch* for many years.

Samsom, Charles Rummy (born 1883) Brit airman served on many fronts during the Great War and was renowned for his extraordinary daring in air organization he earned rapid promotion.

Saneroff, William (1816-93) Eng divine became Archbishop of Canterbury (1877) deprived for refusing to take the oath to William and Mary (1871).

Sand, George See Dudenant, Armandine.

Sanday, William, D.D. (1843-1920) Eng theologian became professor of Logic at Oxford his works included *The Gospel in the Second Century* and *Life of Christ in Recent Research*.

Sandeman, Robert (1718-71) Scot divine married a daughter of John Galsworthy founded the so-called Sandemanians.

Sandhurst, William Mansfield, Baron (1810-76) Brit general distinguished himself in the Indian Mutiny as Chief of the staff to Sir Colin Campbell was commander in chief in India (1865-70).

Sandwich, Edward Montagu, 1st Earl of (1626-72) Eng admiral, conveyed Charles II to Eng and was killed at Southwell Bay during one of his many engagements against the Dutch.

Sandwich, John Montagu, 4th Earl of (1718-92) 1st Lord of the Admiralty (1771-92) gave his name to the sandwich lunch.

Sanders, Edwin (1616-88) Eng divine made Archbishop of York (1576) was imprisoned by Mary for preaching in favour of Lady Jane Grey.

Sanders, Sir John Edwin (born 1844) Eng man of letters chiefly noted for his *History of Classical Scholarship*.

Sanguille, Antonio de (died 1546) It architect who succeeded Bramante as architect of St Peter's.

Sankhy, Ira David (1840-1908) Amer preacher and revivalist, visited Great Britain with Moody, composed a number of sacred songs.

Sannazaro, Jacopo (1456-1530), It poet,

author of *Arcadia* and the Latin poem *De Partu Virginis* through which he gained the name of the Christian Virgil.

Sant, James (1820-1916) Eng artist among his works are *The Children in the Wood* (1864) *Prosperity—Adversity* (1877) and *The Souls Awake* (1888).

Santa-Anna, Antonio Lopes de (1795-1878) Mex general became pres (1833) defended Vera Cruz against the Fr (1838) and conducted the war against the U.S., was dictator (1841-44) and (1853-55).

Santarra, Antonio Joseph (1752-1809) Fr revolutionist who became commander of the National Guard fell under suspicion as a Dantonist and was imprisoned.

Santi Giovanni (died 1494) It painter father of Raphael there is a *Madonna and Child* by him in the National Gallery London.

Santley, Sir Charles (born 1834) Eng singer and composer sang in Haydn's *Creation* (1857) and made his debut in operatic parts (1849).

Santos-Dumont, Alberto (born 1873) Fr aviator 925, 930, 931.

Sappho (7th cent B.C.) Greek poetess and to have invented the metre called by her name fragments only of the works of the Tenth Muse are extant.

Saraceni, Martin Mathias (1844-1908) Sp violinist played with success in London on the Continent and America, his many compositions include *Prière et Berceuse* and *Caprice Basque* (1881).

Sarcey, Françoise (1827-99) Fr writer contributed dramatic critiques to *Le Figaro* and wrote *History of the Tragic of Paris* (*Comedien et Comédienne*) etc.

Sardou, Victorien (1831-1908) Fr dramatist his best known plays were *Les Femmes d'Alger* (the original of *A Scrap of Paper*) *Odette* *Padora* *La Tosca* *Rabagas* (1872) *Robert-pierre* (1902) and *Dante* (1904).

Sargent, John Singer (1856-1925) Amer painter B.A. (1897) famous for his portraits and landscapes.

Sarpi, Paolo (1572-1623) Venetian patriot defended Venice against the papal claims and was the victim of many attempts of assassination his *History of the Council of Trent* was first published in London.

Sarrail, Maurice Paul Emmanuel (born 1856) Fr soldier commanded 11th Army (1914) later commander in chief of the Salonica forces.

Sarsfield, Patrick (1643-93) Fr soldier distinguished himself by his efforts at Limerick and elsewhere to restore the authority of James II was killed while serving in the Fr army.

Sauer, Emil (born 1862) Ger pianist and composer studied under Liszt and gave recitals in London and America works include pianoforte concertos.

Saunders, James, Baron de (1757-1836) Brit admiral was second in command at the Nile (1798) commanded the Baltic fleet and in 1831 became vice admiral of Eng.

Saussure, Horace Bénédict de (1740-99) Swiss physicist made several improvements in meteorological instruments and left a record of his travels. *Voyages dans les Alpes* a work of great scientific value.

Savage, Richard (died 1748) Eng poet was a friend of Dr Johnson, who wrote his life received a small pension for a Birthday Ode to the Queen, but died in a debtor's prison at Bristol his chief work was the tragedy, *Sir Thomas Overbury*.

Savary, Anne Jean Marie René, Duc de (1774-1833) Fr general became aide de camp to Napoleon and was entrusted with several diplomatic missions fled the country under sentence of death at the restoration, but was later acquitted.

Savigny, Friedrich Karl von (1779-1861) Ger jurist of Fr Huguenot descent he wrote *System des heutigen Römischen Rechts* and *Geschichte des Römischen Rechts im Mittelalter*.

Savile of Rufford, John, 1st Baron (1818-98) Brit diplomatist as Sir John Savile Lumley he was appointed ambassador to It (1887) made a peer in 1888 having previously dropped the name Lumley.

Saville, Sir Henry (1549-1622) Eng scholar was tutor to Queen Elizabeth founded professorships of astronomy and geometry at Oxford and published a collection of works by English historians.

Savonarola, Girolamo (1452-98) Italian preacher acquired great political influence in Florence where he denounced abuses of all kinds excommunicated and put to death.

Saxe, Maurice, Comte de (1696-1750) Fr soldier was the victor of Fontenoy left a work entitled *Mes Réveries* (1757) which was subsequently translated.

Saxe Grammaton (12th cent.) Danish writer author of *Danorum Regum Heroumque Historia* on which *Rem* is founded.

Say, Jean Baptiste (1767-1832) Fr economist in his *Traité d'Economie Politique* and other works aimed at popularising the doctrine of Adam Smith.

Say, Jean Baptiste Léon (1826-96) Fr politician and author grandson of the above several times Finance Minister he wrote *Histoire de la Caisse d'Escompte* a translation of Gossen's *Theory of Foreign Exchanges* and other works of much value.

Sayer, Archibald Henry (born 1846) Eng philologist among his works are *Principles of Comparative Philology* and an Assyrian grammar professor of Assyriology Oxford (1891-1919).

Scaliger, Joseph Justus (1540-1609) Fr philologist son of Julius Caesar Scaliger wrote *De Emendatione Temporum* and edited many of the classics.

Scaliger, Julius Caesar (1484-1558) Fr classical scholar known as the elder Scaliger wrote *De Causis Linguae Latinae* a defence of Cicero against Erasmus and other works.

Scanderbeg (George Kastrioti) (1403-67) Albanian prince renounced Moham medanism and maintained a long and successful war against the Turks among whom he had been brought up as a hostage.

Scarlatti, Alessandro (1659-1755) It composer whose works include about one hundred operas as well as a great number of masses and motets.

Scarlatti, Domenico (1685-1757) It composer son of above was a friend of Handel composed Church music and operas.

Scarlatti, Sir James York (1789-1871) Brit soldier commanded with distinction in the Crimea a brigade of cavalry and was promoted lieutenant general (1862).

Scarron, Paul (1610-60) Fr satirist his band of *Mademoiselle d'Aubigne* afterwards *Madame de Manteillon* chiefly noted for *Le Roman Comique*.

Schaff, Philip (1819-93) Amer theologian, born in Switzerland was pres of the Amer Bible Revision Committee and his chief works are *History of the Christian Church* *The Creeds of Christendom* *Dictionary of the Bible*.

Scharnhorst, Gerhard Johann David von (1756-1813) Prus general skillfully reorganised the army of Prussia against the orders of Napoleon chief of Blücher's staff (1813).

Scheele, Karl Wilhelm (1742-86) Swedish chemist discovered several acids and determined the nature of others his only written work was *Experimenta on Air and Fire*.

Schewer, Reinhold von (born 1853) Ger sailor commanded the Ger High Sea Fleet during Great War and was in command at Jutland resigned early in 1919.

Scheffel, Joseph Viktor von (1826-86) Ger poet and novelist chief works are *The Trumpeter of Sackingen* and *Gaudeamus* a collection of student songs, of which an English translation appeared in 1872.

Scheffer, Ary (1796-1858), Fr painter, exhibited at Amsterdam at the age of twelve, and afterwards largely at Paris, being specially noted for his historical and religious studies

Schelling, Friedrich Wilhelm Joseph von (1775-1854), Ger idealist philosopher, chief works were "The Ego as Principle of Philosophy," and "Philosophical Investigations Concerning the Essence of Human Freedom"

Schjaparelli, Giovanni (1855-1910), It astronomer, chief astronomer at Milan (1882-1900), first advanced the theory as to the existence of canals on the planet Mars

Schiller, Johann Christoph Friedrich von (1759-1805), Ger poet, 193, 193, 194, 195

Schlegel, August Wilhelm von (1767-1845), Ger critic, was part-editor of the *Athenäum*, the organ of the Romantic school, and in 1818 became professor at Bonn, chief works were a translation of Shakespeare, "Kritische Schriften," and some poems

Schlegel, Karl Friedrich von (1772-1829), Ger critic, brother of August, noted for his "Ueber die Sprache und Weisheit der Indier" (1808), and lectures on "The History of Ancient and Modern Literature"

Schleiermacher, Friedrich Ernst Daniel (1768-1834), Ger theologian who exercised great influence as a preacher and writer, his works included a translation of Plato's works (1817)

Schliemann, Heinrich (1822-90), classical scholar and archaeologist, made valuable discoveries at Mycenae and other ancient sites subsequently settled at Athens, where he published the results of his excavations and researches in the East

Schott, Arthur (born 1863), Austrian dramatist, many of whose clever plays have been translated into Eng

Schomberg, Friedrich Hermann, Duke of (1618-90), soldier of fortune, was made marshal of Fr though a Protestant for his services against Sp, he afterwards returned to the service of the Princes of Orange and was killed at the battle of the Boyne

Schongauer, Martin (1446-91), Ger engraver and painter, some of his best engravings are in the Brit Museum

Schopenhauer, Arthur (1788-1860), Ger philosopher, his great work is "The World as Will and Idea" (1819)

Schouvaloff, Peter, Count (1827-89), Rus diplomatist, appointed ambassador to Eng (1874), he did much to avert war between Eng and Rus, was second plenipotentiary at the Berlin Congress

Schreiner, Olive (1862-1920), S African writer, wrote "The Story of an African Farm," "Dreams" (1891), and evinced sympathies with the Boers in "An English South African's View of the Situation" (1899)

Schreiner, William Philip (1857-1919), S African statesman, was Attorney General under Rhodes and Prime Minister (1898-1900). Later appointed High Commissioner in London

Schubert, Franz Peter (1797-1828), Aus composer, 1491

Schulze-Dahlmann, Hermann (1803-83), Ger economist, represented Berlin in the Reichstag, among his works was "Kapitel zu einem Deutschen Arbeiterkatechismus" (1878)

Schumann, Clara (1819-96), Ger musician, one of the greatest concert pianists of her time, 1238, 1240, 1242

Schumann, Robert Alexander (1810-56), Ger composer, determined to become a great pianist, but, after hurting his hand, turned to composition, his chief works being "Etudes Symphoniques," "Pavannes," and many symphonies and sonatas, 1238

Schurz, Karl (1829-1906), Amer soldier and statesman, held commands in the Civil War and later became United States senator, opposing the policy of Grant, was Sec of the Interior (1877-81)

Schuster, Sir Arthur (born 1851), Brit physicist, chief of eclipse expedition to Nam (1875), photographed for the first time the spectrum of the solar corona (1882)

Schwarzenberg, Karl, Prinz von (1771-1820), Aus general, served with distinction throughout the Napoleonic wars, commanded the troops of the Allies (1813-14), and the Russians and Austrians in 1815

Schwarzburg, Georg August (born 1836), Ger traveller discovered the "Welle" or Aruwi River in 1862, published "Im Herzen von Afrika" (1878), and later explored the country between the Nile and the Red Sea

Scioppius, Caspar (1578-1649), Ger scholar and writer, "the Attila of Authors" wrote with great bitterness against the Protestants ("Classicum Belli Sacri," etc)

Seipen, Lucius Cornelius, brother of the elder Africanus, was consul in 190 B.C. and obtained the surname, Asiaticus, for his conduct of the Syrian war

Seipen Africanus, Publius Cornelius (237?-183 B.C.) Rom general, conquered Sp, became consul, and defeated Hannibal at Zama (202 B.C.)

Seipen Africanus, Publius Cornelius (died 129 B.C.), took Carthage in 146 B.C. and distinguished himself by the capture of Numantia, was twice consul but became unpopular by his resistance to agrarian reforms

Searesby, William (1789-1857), Brit explorer, in 1823 surveyed the eastern coast of Greenland subsequently entered the Church, but in 1855 made a voyage to Melbourne to make magnetic observations

Scott, Clement William (1841-1904), Brit dramatic critic, critic to "The Daily Telegraph," wrote (originally in *Punch*) "Lays and Lyrics," etc

Scott, Dunkinfield Henry (born 1854), Brit scientist, professor at Royal College of Science (1883-92), wrote "The Evolution of Plants" (1911), etc

Scott, Sir George Gilbert (1811-78), Brit architect, works include the Martyrs' Memorial, Oxford, and the Albert Memorial, Kensington, E.A. (1861)

Scott, Michael (died 1291), Scotsman patronized by the Emperor Frederick II, he had the reputation of a magician throughout Europe, translated Aristotle and Avicenna into Latin

Scott, Michael (1789-1935), Brit author of "Tom Cringle's Log" (1829), and "The Cruise of the Midge" (born in Scot, but lived chiefly in Jamaica)

Scott, Sir Percy Morerton (1855-1924), Brit admiral, his genius was mainly directed towards improving and developing naval gunnery, saw much distinguished service and held many commands, was made a baronet in 1913, and during World War was in charge of the anti-aircraft defence of London

Scott, Robert Falcon (1868-1912), Eng polar explorer, 9

Scott, Sir Walter, Bart. (1771-1832), Scot novelist and poet, 245

Scott, Winfield (1786-1866), Amer general was captured by the Brit in 1812, became commander-in-chief of the U.S. army (1842) and conducted the war against Mexico

Serabini, Alexander Nicholas (1871-1915), Rus composer who introduced a new system of harmony which was unfavourably received at first, his piano and orchestral works became very popular

Servé, Augustin Eugène (1791-1861), Fr dramatist, *Une Nuit de la Garde Nationale* (1816), his first success, was followed by numerous vaudevilles and comedies written in collaboration, these include *Les Premiers Amours* and *Bertrand et Raton*

Serres, Sir William (1823-83), Eng judge, of humble origin, became notorious for his subservience to the court, and was removed from the Bench (1881)

Serres, Richard de (1328-1403), Eng statesman and warrior, took part in the wars of Edward III, and became steward of the household and Chancellor under Richard II

Sesbry, Georges de (1601-87), Fr writer, author of "Observations on the Id" His sister, Madeline, or Madeline (1607-1701), wrote romances which had

great vogue in their day, including "Le Grand Cyrus"

Seaman, Sir Owen (born 1861), Brit poet and journalist, educated at Cambridge, and after being on the staff of *Punch* for some years, became editor in 1906, has produced many notable works and was knighted in 1914

Seaton, John Colborne, 1st Baron (1778-1863), Brit general, served in the Peninsula and at Waterloo, and became field-marshal (1860), was Governor-General of Canada during the rebellion

Sebastian (1554-78), King of Portugal allied himself with the Sultan of Morocco in an attempt to drive the Moors out of Africa, but was killed in battle

Sebastiani, Horace François Eschene, Comte (1772-1851), marshal of Fr, defended Constantinople against the Rus, and, after further service, was ambassador in Eng (1835-40)

Secker, Thomas (1693-1768), Eng divine held the sees of Bristol and Oxford, and became Archbishop of Canterbury (1758)

Seddon, Richard John (1845-1906), New Zealand statesman, was Prime Minister from 1893 until his death, and was responsible for many reforms and much beneficial legislation

Sedgwick, Adam (1765-1837), Eng geologist, became Woodwardian professor of geology at Cambridge (1813)

Sedley, Sir Charles (1639-1701), Eng dramatist and wit, a great favourite of Charles II

Sesley, John Edward Bernard (born 1848), Brit soldier and statesman, Sec for War (1912-14), Under-Sec for Air (1919), **Sesley, Sir John Robert** (1834-95), Brit historian, in 1860 became regius prof of modern history at Cambridge, published anonymously "L'ère Homo," and wrote "Expansion of England" (1883), etc

Séguin, Louis Philippe, Comte de (1753-1830), Fr diplomatist, was entrusted with several important missions, especially to Rus, also wrote several works, including "us Memoirs"

Seymour, Lucius Aelius (20 B.C.-A.D. 31), minister of the Emperor Tiberius, on whose retirement he became supreme, was afterwards put to death on a charge of conspiracy

Selborne, Roundell Palmer, Earl of (1812-95), Brit lawyer and statesman, entered Parl in 1847 and was successively Solicitor General, Attorney General, and Lord Chancellor, published "A Defence of the Church of England against Disestablishment" (1886)

Selby, William Court Gully, Viscount (1835-1908), Brit politician, entered Parl as a Liberal (1886), Speaker (1895-1901)

Selden, John (1584-1654), Eng antiquarian writer, his chief works were "History of Justice," "Titula of Honour," and "Table Talk"

Selenus I (Nicator) (354-281 B.C.), King of Syria, was one of Alexander's best generals, and greatly extended the province of Babylon, which was his share of his master's inheritance, put to death by Ptolemy Ceraunus

Selenus II (Callinicus) (240-226 B.C.), had a disastrous career, being finally defeated and killed by the Parthians

Selim I (1465-1521), Sultan of Turkey, conquered Mesopotamia, Kurdistan, Armenia and Egypt

Selim II (1524-74), Sultan of Turkey during his reign war was carried on with the Pope, Sp, and Venice, the issue being the battle of Lepanto

Selim III (1782-1808), Sultan of Turkey was compelled to cede the Crimea to Rus by the Peace of Jassy (1792), was murdered following his attempts to introduce European customs into Turkey

Selkirk, Alexander (1678-1721), Scot buccaneer, afterwards a lieutenant in the navy, the account of his four years' life in Juan Fernandez formed the basis of "Robinson Crusoe"

Selwyn, George Augustus (1719-91), Brit wit and member of Parl

Selwyn, George Augustus (1809-78), Brit divine became first Bishop of New Zealand (1841) and Bishop of Lichfield (1867)

Sembrich, Marcella (born 1858), Austrian singer, made several successful ap-

pearances in London and elsewhere her favourite parts being Semele, Martha and Felicia was prima donna at the Metropolitan Opera House, New York (1898-1900)

Semiramis, Queen of Assyria (about 1250 B.C.) mythical founder of Nineveh

Seneeca, Lucius Annaeus (4 B.C. - A.D. 65) Rom. Stoic philosopher became tutor to Nero but being accused of conspiracy, he died by his own hand his works include admirable moral treatises

Sensfelder, Alois (1771-1834) Ger. inventor of lithography became director of the royal lithographic office at Munich

Senior, Nassau William (1790-1864), Eng. economist was professor of political economy at Oxford (1825-30 and 1840-43), also author of literary essays and works on economics

Sergio, Mahida (born 1856) It. novelist, author of the "Land of Cockayne" and other novels, translated into Eng.

Sergius I (died 701) Pope had to leave Rome for several years on account of his opposition to Justinian, baptized (edwall) king of the West Saxons

Sergius II (died 847) Pope opposed by the Emperor Lothar during his pontificate the Saracens attacked Rome

Sergius III (died 911) Pope (898-911)

Sergius IV (died 1012) Pope, succeeded John XVIII (1009)

Serpa Pinto (Alexandre Alberto de la Rocha) (1846-1900) Port. explorer travelled Africa (1877-79) and after further expeditions was made Governor of Mozambique (1880) his travels gave rise to the dispute between Gt. Brit. and Port. (1890-91)

Serrano, Francisco, Duke de la Torre (1810-83) Sp. soldier after the overthrow of the Bourbons (1868) became head of the provisional govt. hid to flee the country later on account of his opposition to the republic, but returned to power after a few years

Sertorius, Quintus (died 72 B.C.), Rom. general made himself master of Sp. and hid it for ten years against the Rom. arms

Servetus, Michael (1511-53) Sp. theologian escaped from the Inquisition of Vienna to Geneva where he was burnt to death for his Arminianism by the orders of Calvin

Servius, Robert William (born 1874) novelist and poet born at Preston went to Canada and published many works of fiction, with his in the North West which achieved tremendous popularity, these include "Ballads of a Chechako"

Servus, Tullus, sixth of the fabled kings of Rome

Seton, Ernest Thompson (born 1900) Canadian author and naturalist has published many works dealing with wild animal life and enthusiastically supported the Boy Scout movement

Severn, Joseph (1796-1879) Brit. painter is chiefly known as the friend of Haystack whom he nursed in his last illness (1821)

Severus, Septimius (146-211) Rom. Emperor defeated his rivals, Niger and Albinus drove back the Parthians and having subdued the Picts, built the wall called by his name

Séverine, Marie, Marquise de (1636-96) Fr. writer, author of the celebrated "Lettres" written to her daughter

Seward, Anna (1747-1809), Eng. writer author of some sonnets and "Life of Dr. Darwin" (James Darwin)

Seward, William Henry (1801-72) Amer. statesman headed the republican party and an unsuccessful candidate for the presidency became sec. of state under Lincoln (1861)

Seymour, Sir Edward Hobart (born 1840) Brit. sailor, was admiral of the fleet (1905-10) commanded allied forces in Boxer rebellion (1900) one of original members of Order of Merit '39

Seymour, Sir Michael (1768-1834) 1st admiral who captured the *Trafalgar* (1804) and *Neptune* (1809) being created a baronet for his services lost an arm during the battle on the glorious day of June 1794

Seymour of Sudley, Thomas (died 1541)

Eng. sailor distinguished himself as admiral under Henry VIII, but in the next reign secretly married the king's widow was beheaded on a charge of treason

Sforza, Francesco (1401-66) It. adventurer son of the following was employed by the Duke of Milan against Florence and Venice later married the daughter of the duke and on his death seized the duchy

Sforza, Jacopo (Attiendola) (1389-1424), It. adventurer took service with Pope John X. and Ladislaus King of Naples who made him Grand Constable was afterwards employed by Louis of Anjou

Sforza, Ludovico "the Moor" (1461-1508) 3rd son of Francesco Sforza, invited Charles VIII to invade It. and in 1494 succeeded to the dukedom in the subsequent invasion by Louis XII was made prisoner and died in It.

Shankston, Sir Ernest (1874-1922) Brit. naval officer and explorer 429, 12, 13

Shadwell, Thomas (1642-92) Eng. dramatist was ridiculed by Dryden whom he succeeded as poet laureate wrote *Epomella* *The Lancashire Witches* and other plays

Shaftesbury, Anthony Ashley Cooper, 1st Earl of (1621-83), Eng. statesman was Privy councillor under Cromwell and later became Lord Chancellor passed the Habeas Corpus Act but was tried for treason and on his release from the Tower fled to Holland (1682)

Shaftesbury, Anthony Ashley Cooper, 3rd Earl of (1671-1713) Eng. philosopher and politician his chief work is *Characteristics of Men, Manners, Opinions and Times*

Shaftesbury, Anthony Ashley Cooper, 7th Earl of (1801-86) Brit. philanthropist 669

Shah Jehan (died 1658) Mogul Emperor was crowned in 1627 and soon conquered part of the Deccan, but was deposed by his son Aurangzeb

Sharp, John Campbell (1819-86) Brit. poet became professor of poetry at Oxford (1877) wrote *Glen Deussay* and other poems as well as *Studies in Poetry and Philosophy* Burns ("Men of Letters" series) etc

Shakespeare, William (1564-1616), Eng. dramatist and poet 829

Shannon, Sir James Joshua (born 1862) Amer. artist first exhibited at the Royal Academy in 1881 and has earned a great name for his portraits became R.A. in 1900 and was knighted in 1922

Sharp, Granville (1786-1814) Brit. philanthropist who instituted the Society for the Abolition of Slave Trade, was chief founder of the B. Soc. Society

Sharp, James (1618-73) Scot. divine Arch. bishop of St. Andrews became very popular for his calm treatment of the Presbyterians and was murdered in his carriage near St. Andrews

Sharp, William (1806-1905), Scot. poet and novelist besides his poems and novels, he wrote several important biographies also published "The Winged Destiny" and numerous other tales under the pseudonym Fiona Macleod

Shaw, Sir Eyre Massey, K.C.B. (1830-1906), chief officer of the London Fire Brigade (1861-91)

Shaw, George Bernard (born 1866), Ir. dramatist, critic, and essayist, 662

Shaw, Richard Norman (1831-1912), Brit. architect became known for his country houses and was architect of New Scotland Yard

Shaw, Sir Martin Archer (1769-1850), Brit. painter was elected R.A. in 1800, and in 1830 became pres. of the Academy his *Infant Bacchus* "is in the National Gallery, London

Sheepshanks, John (1767-1868), Brit. art collector formed and presented to the nation the collection of pictures known as the "Sheepshanks Gallery"

Sheepshanks, Richard (1794-1853), Brit. astronomer and mathematician whose chief work was the completion of the restoration of the standards of weight and measure

Sheffield, John Baker Holroyd, Earl of (1733-1821), Brit. statesman, remem-

bered as the friend of Gibbon and editor of his miscellaneous works

Shelley, Richard Laier (1791-1851), Ir. politician orator and dramatist took an active part in the Catholic Emancipation and Repeal agitations, but afterwards accepted office under the Whigs, wrote *Brutus* and other plays

Sheldon, Gilbert (1598-1677), Eng. divine, was warden of All Souls, Oxford, where he built the Sheldonian theatre he was made Archbishop of Canterbury in 1663

Shelley, Percy Bysshe (1792-1822), Brit. poet his chief works are *Queen Mab*, "The Revolt of Islam", "Prometheus Unbound", "Rosalind and Helen", "Adonais", "Hellas", "The Cenci", and many splendid lyrics also various essays including "The Defence of Poetry" and a translation of Plato's *Banquet*

Shenstone, William (1714-63) Eng. poet whose best works are "The Pastoral Ballad" and "The Schoolmistress"

Shepstone, Sir Theophilus (1817-93), S. African statesman became secretary for native affairs and conducted the negotiations with the Zulus by which the Transvaal was annexed (1877)

Sherraton, Thomas (1751-1806) Brit. designer of furniture who gave his name to a simple structural style which he introduced poor and self-educated he published some able works on his calling

Sherridan, Philip Henry (1831-88) Amer. general distinguished himself during the Civil War in which he served under Grant in 1867 he quarrelled with President Johnson and in consequence was dismissed from his command

Sherridan, Richard Brinsley (1751-1816), Brit. dramatist 1251

Sherrif Pasha (1818-87) Egyptian statesman after being Minister of Foreign Affairs and three times regent became chief minister an office he held several times resigned on account of his aversion to English influence

Sherman, William Tecumseh (1820-91) Amer. general saw brilliant service during the Civil War and joining Grant, led the expedition against Vicksburg after many victories he became commander in chief of the U.S. army (1869-84)

Shilleto, Richard (1809-76) Brit. classical scholar, born in Yorkshire published three editions of the first book of *Thucydides*

Shirley, James (1596-1666) Eng. dramatist resigned a curacy on becoming a Romanist, and produced about 40 plays, lost all his property in the fire of London

Shore, Jane, mistress of Edward IV after the death of the king became attached to Lord Hastings, in whose fall she was involved she was forced to do public penance, and probably died in poverty

Shorser, Clement King (born 1857), Eng. journalist and a noted literary authority his works include "Handbook to Victorian Literature" (1897), and "The Brontës: Life and Letters" (1907)

Shorthouse, Joseph Henry (1834-1908), Brit. novelist whose chief works were "John Inglesant" (1881), "Little Schoolmaster Mark" (1885), "Sir Percival" (1886), etc

Shovel, Sir Cloudesley (1650-1707), Brit. admiral distinguished himself at the battle of Beachy Head (1690) La Hogue (1692), Dunkirk (1696) and also fought at Malaga (1704), Barcelona (1706), and Toulon (1707)

Shrapnel, Henry (1761-1842), Brit. soldier, inventor of the case shot called after him, for which he received a pension of £1,200

Sibelius, Jean (born 1865), Finnish musical composer, popular among his works are *Volle Irlande* and *Finnland* he has conducted in London

Sickingen, Franz von (1481-1538) Ger. warrior, the protector of Rotteln and the reformers, he was captured and severely wounded in a war with the Archbishop of Treves

Siddons, Sarah (1756-1831), Eng. tragic actress, 169.

Sidgwick, Henry (1888-1900), Brit. philosopher; took great interest in promoting female education; professor of Moral Philosophy at Cambridge (1883); wrote "Methods of Ethics," etc.

Sims, Henry (1822-83), Eng. politician; author of "Discourses on Government"; was an active Parliamentarian during the Civil War, and was afterwards executed for alleged complicity in the Eye House plot.

Sinay, Sir Philip (1854-86), Eng. soldier and poet; was commander of the cavalry in the Low Countries, and lost his life at the battle of Zutphen; he wrote "Arcadia" and "An Apologie for Poetrie."

Sinclair, Ludwig von (1609-75), Ger. artist; inventor of mezzotint engraving, introduced into Eng. by Prince Rupert.

Siemens, Ernst Werner von (1816-92), Ger. electrical engineer; introduced many telegraphic improvements and invented and applied the quicksilver unit for measurements, polarized relays, the dynamo-electric machine, and the gutta-percha press.

Siemens, Sir William (Carl) (1823-83), Brit. engineer; invented the chronometric governor, "Siemens" furnace, etc., applied electricity to locomotives, and introduced improvements in steel-making, etc.

Slankiewicz Henryk (1846-1916), Polish novelist; author of the much-translated "Quo Vadis" (1896), and many other notable works; awarded the Nobel prize for literature (1906).

Slavie, Emmanuel Joseph, Comte (the Abbé) (1748-1838), Fr. politician; published in 1789 "Qu'est-ce que le Tiers-Etat?" and was afterwards a member of the Council of the Five Hundred; as one of the consuls after the 18th Brumaire, he opposed the return of Bonaparte.

Sigismund (1368-1437), Rom. Emperor; conquered Wallachia and was crowned emperor in 1414; obtained the Bohemian crown, though defeated by John Ziska, and was crowned King of Italy in 1431.

Sigismund I (1466-1548), King of Poland; succeeded his brother Alexander in 1506, and carried on wars with Russia and the Teutonic knights; he opposed the Reformation.

Sigismund III (1566-1632), King of Poland, grandson of Sigismund I; compelled his rival to renounce the Polish crown, and in 1593 became King of Sweden, but was deposed in 1604 for his subservience to the Jesuits.

Signorelli, Luca (da Cortona) (circa 1441-1526?), It. painter, whose most famous works were the frescoes in the cathedral of Orvieto.

Sigurðsson, Jon (1811-79), Icelandic statesman and writer; had a chief hand in obtaining a constitution for the island; wrote "The Political State of Iceland," etc.

Silius Italicus, Gaius (25-99), Rom. poet and orator; was proconsul in Asia, and wrote a poem on the second Punic war.

Simson, Charles (1769-1830), Brit. divine; founder of the Evangelical movement within the Eng. Church.

Simson of Durham (13th cent.), Eng. historian; wrote a "Chronicle" extending from 616 to 1190.

Simson Syntes, Saint (5th cent.), Syrian shepherd, who became a monk, and lived on the top of pillars in order to be nearer heaven; it was said; a set of "pillar saints" succeeded him.

Simnal, Lambert (circa 1475-1535), Eng. impostor; pretender to the English crown; personated Edward, Earl of Warwick, was crowned at Dublin, but defeated at Stoke, and made a menial in the household of Henry VII.

Simons, Sir John (1816-1904), Brit. surgeon; was medical officer to the chief Government departments (1855-76), and drew up many reports on sanitation.

Simons, Sir John Alcock (born 1873),

Brit. lawyer and politician; Attorney-General (1913); Home Sec. (1916).

Simon, Jules François (1814-96), Fr. statesman; Premier (1876-77).

Simonides (7th cent. B.C.), Gk. poet, who took his subjects from the Persian war.

Simpson, Sir James Young (1811-70), Scot. physician, 221.

Simrock, Karl Joseph (1802-79), Ger. scholar and poet, chiefly known by his editions of the "Nibelungenlied"; also edited several other Ger. classics and wrote "Wieland der Schmied."

Sims, George Robert (1847-1922), Brit. dramatist and journalist, whose chief plays are *The Lights of London* (1881), *The Romany Rye* (1884), *The Harbour Lights*, etc.; also published "How the Poor Live," the "Dagonet Ballads," and many novels.

Sims, William Sowden (born 1858), Amer. sailor; after holding various commands he was placed at the head of the U.S. fleet operating in the war theatre (1917), and became vice-admiral a year later.

Sinclair, Sir John, Bart. (1754-1835), Brit. statesman and politician; was the originator of the Board of Agriculture in 1793; chief works were "History of the Revenue" and "Statistical Account of Scotland."

Sindia, name of a Mahabharata ruling family. Madhava Rao (died 1794); with Holkar invaded Hindustan in 1770, took Delhi and Agra, and, with the help of a Fr. officer, gained the battle of Patan in 1790; he was the first native who armed his troops in the European manner; Daulat Rao (died 1827) succeeded Madhava Rao, and after being defeated by the Brit., he surrendered some of his territory in 1806, and was thenceforth friendly.

Sinding, Christian (born 1856), Norwegian composer; his works include an opera, violin concertos, and a large number of songs and pieces for the pianoforte.

Simondet, Jean Charles Leonard de (1773-1842), Swiss historian and economist; his writings include "History of the Italian Republics of the Middle Ages" (1807-18), "History of the French," and some economic works.

Sixtus IV (1414-84), Pope; elected (1471); supported the Pazzi against the Medici, and Venice against Ferrara; he built the Sixtine chapel.

Sixtus V (1521-90), Pope; originally a shepherd boy; he was elected in 1585; approved the expedition of Philip II against Eng., and at Rome rebuilt the Vatican Library; put down brigandage in his dominions.

Skeat, Walter William (1835-1912), Eng. philologist; was professor of Anglo-Saxon at Cambridge in 1878; chief works are an "Etymological English Dictionary" and editions of "Piers the Plowman," "Chaucer," etc.

Skobeleff, Mikhail Dmitrievich (1843-82), Rus. general; distinguished himself in the Khiva and Khokand expeditions, and rendered brilliant services at Plevna in the Russo-Turkish war; captured Geok Tepe (1881).

Slade, Felix (1790-1869), Eng. art collector; endowed the Slade professorships of fine arts at Oxford, Cambridge, and London Universities.

Slesser, Sir Henry (born 1883), Brit. politician and lawyer; standing counsel to the Labour party; Solicitor-General in First Labour Ministry (1924).

Shall, John (1793-1871), Amer. diplomatist; confederate commander to Fr.; seized by U.S.A. on steamer *Trent*; afterwards released and obtained supplies for confederate army and navy in Fr.

Sloane, Sir Hans, Bart. (1680-1753), Eng. physician and naturalist; went to Jamaica as physician to the Governor (1687), and there collected a variety of plants and other curiosities; Sloane Street and Square named after him; his collections, with another collection, were opened as British Museum (1759).

Slocum, Henry Warner (1827-94), Amer. general in Civil War; fought at Bull Run, Chancellorsville, Gettysburg, and in all the Virginia campaigns; commanded left wing on Sherman's march to sea; later a member of congress.

Smart, Christopher (1722-71), Eng. poet,

translator and epigrammatist; chiefly known by his "Song to David," a poem enthusiastically praised by D. G. Rossetti; wrote numerous satires, epigrams and versions of the classics; intemperance unhinged his never very stable mind, and he was twice confined in a madhouse.

Smart, Sir George (1776-1867), Eng. musician; became organist at the Chapel Royal (1791); as musical director at Covent Garden, received Weber, who died at his house; among his pupils was Jenny Lind, and he introduced St. Paul and Rosalind's *School Master*.

Smetson, John (1724-92), Eng. civil engineer, 256.

Smedley, Francis (Frank) Edward (1818-84), Eng. novelist; ("Frank Fairleigh," remarkable for the unique picture of education under private tutelage; "Lewis Arundel"; "Harry Coverdale's Courtship").

Smiles, Samuel (1812-1904), Scottish author; left the practice of medicine to become an author; chief works, "Self-Help" (1859), "Lives of the Engineers," and several biographies, including one of "John Murray" the publisher.

Smith, Adam (1723-90), Scot. political economist; professor of logic and moral philosophy at Glasgow University (1751-83); his "Inquiry into the Nature and Causes of the Wealth of Nations" (1776) now regarded as basis of modern economics.

Smith, Donald Alexander. See *Strathcona* and *Mount Royal*, 1st Baron.

Smith, Sir George Adam (born 1856), Eng. Orientalist; for many years correspondent to the *Times* on eastern subjects; professor of Hebrew and Oriental Literature, Free Church College, Glasgow (1892); principal of Aberdeen Univ. (1909); lecturer at various U.S.A. universities and on Britain's war aims (1918); moderator of General Assembly of United Free Church (1916-17). ("Historical Geography of the Holy Land," "Life of Henry Drummond," and numerous standard works on Oriental subjects).

Smith, Goldwin (1824-1910), Canadian scholar and historian; born in Eng.; after a distinguished course at Oxford, where he became fellow of Oriel (1847) and professor of Modern History (1858), settled ten years later in the U.S.A., but went to Canada in 1871. ("Irish History"; "The United Kingdom"; "Reminiscences.")

Smith, Sydney (1771-1845), Eng. divine; founded with Jeffrey and others the *Edinburgh Review* (1802); famed for his wit and religious toleration. ("Mrs. Farington's Fight with the Atlantic Ocean," satire on House of Lords rejecting Reform Bill of 1831).

Smith, William Henry (1825-91), Brit. business man and politician, 1626.

Smith, William Robertson (1846-94), Scot. scholar; was removed in 1881 from his professorship at Aberdeen, which he had held since 1870, for his views on the Old Testament, published in his "Encyclopaedia Britannica," of which he became editor; professor of Arabic at Cambridge; one of the Old Testament revisers. ("The Old Testament in the Jewish Church" and "The Religion of the Semites.")

Smithson, James (1765?-1829), Eng. scientist; founder of Smithsonian Institute, Washington, U.S.A., for education and scientific research; success of U.S. weather bureau and aerodynamical researches due to his enterprise.

Smollett, Tobias George (1721-71), Eng. novelist; was several years in the navy and wrote first Eng. novel dealing with life at sea, "Roderick Random"; one of the creators of the Eng. novel, he was a master of burlesque, rapid action, and broad humour. ("Hamphrey Clinker"; "Peregrine Pickle.")

Smuts, Jan Christian (born 1870), Brit. S. African soldier and statesman; state attorney of S. Africa; republic under Pres. Kruger (1898-9); after Boer War became loyal servant of Brit. Empire, and held portfolios in Transvaal government; rendered invaluable services

during World War is soldier, statesman, and propagandist. Prime Minister of Union of S. Africa (1919-24).

Smyth, Dame Ethel Mary (born 1878). Eng. composer. She received her musical education at Leipzig and made her London debut with a Mass in D which revealed striking qualities and brilliant orchestration. Afterwards composed operas and turned literary gifts to account in supporting Labour Movement (*The Wreckers*, *The Boston Wife*).

Snowden, Philip (born 1864). Eng. Labour leader. Left civil service in 1893 to take up journalism and lecturing on modern social problems. Chairman of Independent Labour Party (1903-6). Socialist M.P. (1906). Chancellor of the Exchequer in first Labour Government (1924).

Soune, Sir John (1773-1847). Eng. architect. Designed the Dulwich Gallery, the old law courts, and Bank of Eng. and left to the nation his house and art museum.

Sobieski, John (1629-96). Polish warrior saved his country from the combination of the Turks and Cossacks by becoming national hero and was elected king (1674).

Socrates (469-400 B.C.). Athenian philosopher 501.

Solomon (10th cent. B.C.). King of Israel. Younger son of David. Famous for his vast wealth which he accumulated rather by trading than conquest and for his wise sayings many of which appear in the Book of Proverbs.

Solomon, Solomon J. (born 1890). Eng. painter. First exhibited at the Royal Academy in 1880. Chief pictures (*Isabella*, *Sarah and Judah*, *Love*, *Nimrod*, and *The Judgment of Paris*).

Solon (638-558 B.C.). Athenian statesman. One of the seven sages. He abolished the Draconian Code and founded a new constitution on the basis of property.

Solyman I the Magnificent (1494-1566). Great Ottoman Sultan and military leader. He successfully invaded Hungary (1541) and captured Bagdad (1533). He built the present walls of Jerusalem.

Somers, John, Baron (1651-1716). Eng. statesman. Was one of the counsel for the Seven Bishops, and chairman of the committee which drew up the Declaration of Rights. Became Solicitor General (1680). Attorney General (1683) and kept in 1697 and Chancellor.

Somerset, Edward Seymour, Duke of (1506-52). Protector of England in early part of Edward VI's reign. Married on 10th against Scotland, favoured the Protestants, but was beheaded after a previous confinement in 1549 on a charge of conspiracy against the lives of some of the privy councillors. He revised the incense of common law.

Somerwall, Mary (1780-1872). Scot. woman. Wife of friend of the Herschels. (The Celestial Mechanism of the Heavens, popular version of Laplace's *Le Mécanique céleste*).

Sonnino, Sidney, Baron (1847-1921). It. statesman. His mother was Eng. He lived in Rome from 1864-1883. Became Premier in 1906 and again in 1909-10. He conducted negotiations prior to Italy's participation in World War and formed Pact of London.

Sophia (1630-1714). Electress of Hanover. Granddaughter of James I. and mother of George I. was heir to the throne by the Act of Settlement, but died just before Anne.

Sophocles (496-403 B.C.). Gr. tragic poet. Fully influenced by Aeschylus, he became his successful rival, he reformed the technique of the drama, modifying the chorus and introducing a third actor. Instead his plays express the spirit of Greece in the age of Pericles and in their character is fatal (*Antigone*, *Oedipus Tyrannus*, *Electra*).

Sopwith, Thomas Octave Murdoch (born 1888). Eng. aviator. He won the Gordon Bennett prize for cross channel flight in 1910. In 1911 he established boywith aviation Co. Ltd. Sopwith aircraft included the Gunbus Fokker during World War.

Sothern, Edward Ashaw (1826-81), Eng.

actor after acting in Eng. made his first appearance at Boston as Dr Pangloss but gained his reputation as Lord Dundreary in *Our American Cousin* which he played over a thousand times in Amer. and nearly five hundred at the Haymarket. He also created the title character in *David Garrick*.

Sothern, Edward Hugh (born 1850), Amer. actor. Son of E. A. Sothern. Successful actor in Shakespearean parts (*Hamlet*, *Macbeth*, *Shylock*, *Petruchio*).

Soult, Nicolas, Jean de Dieu, Duke of Dalmatia (1769-1851). Marshal of Fr. made his reputation at decisive battle of Austerlitz during the Peninsular War. He overran Spain but was defeated by Sir Arthur Wellesley, the Duke of Wellington, at Oporto. He was recalled by Napoleon after a further defeat by Wellington, a brilliant soldier, he changed his political coat several times following the most powerful party.

Sousa, John Philip (b. 1854), Amer. band master and composer. Famous for "march" instruments used in his orchestra (*Washington Post March*, *Stars and Stripes Forever*, etc.).

South, Sir James (1785-1867). Eng. astronomer. He was one of the founders of the Royal Astronomical Society of which he became pres. in 1829 and was associated with John Herschel in observations on the "double" stars.

South, Robert (1794-1716). Eng. divine. Carried on a controversy with Sherlock on the doctrine of the Trinity, and was celebrated both as a preacher and a wit.

Southampton, Henry Wriothesley, 3rd Earl (1573-1624). Eng. courtier. The patron and friend of Shakespeare. Venus and Adonis and Lucrece were dedicated to him, and perhaps, also the sonnets.

Southcott, Joanna (1750-1814). Eng. religious revivalist, she announced that she was about to become the mother of the second Christ, but died childless, leaving a sealed box containing prophecies which has been subject of much discussion.

Southern, Thomas (1680-1746). Eng. dramatist, *Isabella or the Fatal Marriage* in which Mrs. Siddons appeared to great advantage. *Oroonoko* and other tragedies, as well as some comedies.

Southey, Robert (1774-1843). Eng. poet. Son of a linen draper. He first settled at Keswick in 1803 and there wrote the *Lure of Arctura* (1810) and many poems, as well as his lives of Nelson (1813) and Wesley (1820). He came poet laureate in 1813 and received a pension in 1815.

Spee, Count Maximilian von (1561-1914). Ger. admiral. One of the founders of the world war navy. He directed Brit. at Coronel but was decisively beaten by Admiral Sturdee at the battle of the Falklands and perished with his flagship the *Schenbrook*.

Speke, John Hanning (1827-1864), Eng. explorer. 1817, 181, 182, 183.

Spencer, Herbert (1820-1903). Eng. philosopher. Beginning life as a civil engineer, he wrote in his spare time articles on government, sociology, and psychology that rapidly attracted attention. His social statics (1850) and Principles of Psychology (1855) paved the way for his most ambitious work, the system of Synthetic Philosophy. He coined the phrase 'survival of the fittest'.

Spencer, John Forster, 5th Earl (1833-1910). Brit. statesman, was Lord Lieutenant of Ireland from 1868 to 1874. Twice Lord Pres. of the Council, led the opposition in House of Lords.

Spenser, Edward Harold (born 1864), Eng. journalist and author, was at various times on the staff of the *Echo*, *Pall Mall Gazette*, *Daily Chronicle*, *Manchester Guardian*, and *Daily News*. ('Hornet' biographies of H. H. Asquith, General Booth and D. Lloyd George).

Spenser, John Alfred (born 1862), Eng. journalist and author, edited *The News* and *Manchester Gazette* (1896-1922).

Spenser, Edmund (1792-99), Eng. poet. Went to Ireland (1830) as sec. to Lord

Grey de Wilton and lived in Cork county at intervals till the rebellion of Tyrone (1598). His most famous work is the *Pieris Queen*.

Spinoza, Baruch or Benedict (1632-77), Dutch (Jewish) Cath. philosopher. His chief works are *Tractatus Theologico-Politicus*, *Ethica*, and *Cogitata Metaphysica*.

Spohr, Ludwig (1784-1850). Ger. violinist and composer. His chief works are *The Last Judgment*, *Cantata* (oratorios), *The Alchemist* (an opera), symphonies and violin concertos.

Spurgeon, Charles Haddon (1834-1892). Eng. Nonconformist preacher. Came to London in 1853. The Metropolitan Tabernacle being opened in 1861.

Spursheim, Gaspar (1776-1832). Ger. physiologist, one of the founders of phrenology, became acquainted with Gall, who converted him to his views (*Philosophical Principles of Phrenology*).

Staspool, Henry de Vere, Eng. novelist. Left medical profession for literature. His best known stories are imaginative romances, but he has also translated Milton's poems and written his life (*The Blue Lagoon*, *The Pools of Silence*, *The Beach of Dreams*).

Staal-Holstein, Madame de (Anne Louise Germaine Necker, Baronne de Staal-Holstein) (1766-1817). Fr. writer. Her works include *Delphine*, *Corinne*, and many serious essays including *Germany*.

Stamford, William Howard, Viscount (1614-80). Eng. nobleman. Fifth son of Thomas Howard Earl of Arundel. Was one of the five peers denounced by John Gales in connection with the Popish plot and was beheaded on Tower Hill.

Stahl, Georg Ernst (1660-1734). Ger. scientist. Professor at Jena and Halle. He was an exponent of the phlogiston theory of chemistry.

Stambolsky, Alexander (1879-1923). Bulg. irish statesman. He led the agrarian party against the royalists in 1913 and protested against Bulgaria's entry into the World War on the side of Germany. In 1916, he was imprisoned for three years and on his release headed the revolt against Ferdinand. Became Premier (1910).

Stamfordham, Arthur John Riggs, Baron (born 1849), Brit. soldier and court official, after active service in the Zululand War he became Queen Victoria's privy sec. and afterwards acted in similar capacity to King George V.

Stanfield, Jackson (1794-1867). Eng. landscape painter. Was in early life a tailor, his chief pictures were *Market Boats on the Scheldt*, *The Battle of Trafalgar*, *The Gurdock*, *Venice Lomo* which are in the National Gallery, London, B.A. (1835).

Stanford, Sir Charles Villiers (born 1852), Eng. musical composer. Became conductor to the Cambridge Musical Society, and in 1887 professor of music, among his productions are music to Tennyson's *Queen Mary*, Browning's *Cavalier Times*, etc.

Stanford, Leland (1824-93). Amer. capitalist and philanthropist, began as a lawyer and made fortune as railway magnate, founded Leland Stanford Junior Univ. at Palo Alto Cal. U.S.A.

Stanhope, Lady Hester Lucy (1776-1839), 879.

Stanhope, James, 1st Earl (1673-1721), Eng. statesman. Sec. of State (1714-17 and 1718-21). Premier (1717).

Stannhaus, Saint (1030-79), Bishop of Cracow. He was slain by Boleslaus II, king of Poland, and afterwards worshipped as patron saint.

Stanley, Sir Henry Morton (1841-1904), African explorer, 661, 868.

Stanfield, Sir James (1820-98). Brit. statesman. Entered Parli. in 1850 as a Radical, and held a subordinate office in 1863-64, resigning on account of his intimacy with Mazzini. From 1869 to 1871 was sec. to the Treasury and Pres. of the Local Government Board (1871-74). He again occupied that post in the Home Rule ministry.

Stanley, Edwin (1814-69), Amer. states-

man was attorney general and after wards war minister under Lincoln and continued in office under Pres Johnson but quarrelled with him in 1866 was re-elected by the senate after dismissal, but retired after the acquittal of the Pres

Stapledon, Walter de (1261-1326) Eng divine Bishop of Exeter and founder of Exeter College Oxford was killed in a rising of the London citizens

Starr, Lillian Agnes, Anglo-Indian missionary 727

Stawton, Howard (1810-74) Brit chess player and Shakespearean scholar defeated M de St Amant the champion of Europe in 1843 and published Chess player's Handbook which he also brought out an edition of the Shakespearean folio of 1623 and Memorial of Shakespeare

Stead, William Thomas (1849-1912) Eng journalist and founder of the Review of Reviews he championed many causes and was keenly interested in psychical research drowned in wreck of *Titanic*

Stedman, Edmund Clarence (1833-1908) Amer poet and critic (Victorian Poets and Poems) Litical and Idylls

Steed, Henry Winkham (born 1871) Brit journalist, correspondent of *The Times* at Berlin (1898) Rome (1897-1902) Vienna (1912-13) foreign editor of *The Times* (1914-19) during the World War he carried out valuable propaganda work in enemy countries editor of *The Times* (1919) in 1921 he attended Washington Peace Conference (The Rip-buzz Monarchy thirty years)

Steel, Flora Anne (born 1847) Brit novelist lived many years in India which country forms the background of her novels (The Potter's Hunt The Mercy of the Lord Tales of the Tides)

Steele, Sir Richard (1672-1729) Eng essayist and dramatist established with Addison *The Tatler* (1709) *The Spectator* (1711) and *The Guardian*

Steel-Maitland, Sir Arthur (born 1876) Brit politician chairman of Labour Party organization (1911) Under Sec for the colonies (1915-17) chief of Dept of Overseas Trade (1917-19) Minister of Labour (1924)

Steen, Jan Havicksz (1626-79) Dutch painter influenced by Adrian Ostade his genre pictures include *East of St Nicholas* Music Master

Stevens, George (1736-1800) Eng literary critic published an edition of Shakespeare's plays in 1766 and three years later some notes which were incorporated with those of Dr Johnson

Stevens, George Warrington (1869-1900) Eng journalist and war correspondent died of enteric at siege of Ladysmith wrote With Kitchener to Khartum From Capetown to Ladysmith 38

Stefansson, Vilhjalmur (born 1879) Arctic explorer born in Canada during two expeditions (1898-12 and 1913-18) he encountered tribe of Eskimos who had never seen white man discovered three new islands and lived for months without supplies, killing seal deer and musk oxen for food (The Friendly Arctic Hunters of the Great North)

Stein, Heinrich Friedrich Karl, Baron von (1757-1831) Pruss statesman he abolished serfdom reorganized army and was one of the makers of modern Prussia

Steuart, William (1836-1900) Bohemian chess player won the championship of the world by his victory over Anderssen in 1866, and took part in numerous tournaments in 1884 he settled in the United States

Steuart, Charles Proteus, electrical engineer associated with Thomas Alva Edison in some of his inventions 475

Stendhal, pen name of Marie Henri Beyle (1783-1842) Fr novelist and man of letters, after a stirring military career he devoted himself to literature and profoundly influenced the development of the Fr novel ('Le Rouge et le Noir', 'La Chartreuse de Parme')

Stephen (1097?-1154) King of Eng reign marked by civil war with the Eng and Scottish partisans of the claims of the Empress Matilda and also by internal anarchy

Stephen, Saint, first Christian martyr the man full of faith and the Holy Ghost he was stoned to death by his enemies

Stephen, Sir Leslie (1832-1904) Eng essayist and biographer edited the Dictionary of National Biography (1882-91)

Stephen I (977-1038) 1st King of Hungary made Apostolic King by Pope Sylvester active in establishing Christianity and was canonized

Stephens, James (born 1922) Ir poet and short story writer Celtic fantasy and subtle humour are combined in his work ('Insurrections' 'Deirdre' 'Here are Ladies')

Stephenson, George (1781-1848) Eng engineer and inventor 1010

Stephenson, Robert (1803-59) Eng engineer son of George Stephenson 1014, 1015, 1016

Sterne, Laurence (1713-68) Eng novelist country clergyman he did not publish *Tristram Shandy* until his forty-seventh year the novel proved an immediate and continuous success for the volumes of *Tristram Shandy* and the sentimental journey established Sterne's fame as a humorist

Sternhold, Thomas (1500-49) Eng versifier was joint author with Hopkins of the first Eng metrical version of the Psalms

Stevens, Alfred (1816-77) Eng sculptor pupil of Thorvaldsen became director of the Sheffield School of Art in 1850 and in 1857 was entrusted with the execution of the Wellington monument in St Paul's which after 20 years work was unfinished at his death

Stevenson, Robert (1872-1890) Scot engineer completed the Telford Rock-hut house of which he published an account and invented the intermittent and flash and exhibition of light machinery of R L Stevenson

Stevenson, Robert Louis (1850-94) Brit story writer poet and essayist 25

Stevens, Simon (1448-1620) Flemish mathematician was the first to establish the use of decimal fractions

Stewart, Dugald (1733-1825) Scot metaphysician son of Dr Matthew Stewart the mathematician whom he assisted for three years but was appointed in 1781 professor of moral philosophy at Edinburgh (Outlines of Moral Philosophy)

Stewart, Sir Herbert (1843-89) Brit soldier served in the Zulu War made prisoner by the Boers at Mjumba Hill won battle of Abu Hitta (1885) mortally wounded a few days later at Tugbat

Stinner, Hugo (1870-1924) Ger industrial magnate and financier contributor of munitions during World War after wards he bought many newspapers and obtained control of mining and shipping industries

Stirling, Mary Anne (Fanny Clifton) (1810-90) Eng actress made her first appearance at the East London theatre and subsequently played under Watcady at Drury Lane her finest parts were Peg Woffington in *Masks and Faces* and the Nurse in *Romeo and Juliet* retired in 1886

Stokes, Sir George Gabriel (1819-1903) Ir physicist and mathematician he made researches in the study of fluorescence and optics to him also is due the modern theory of motion of viscous fluids sec of the Royal Society in 1884 and later pres

Stone, Marcus (1840-1921) Eng painter son of Frank Stone, A.R.A. exhibited *Rest* at the Academy in 1858 among his subsequent pictures were *Stealing the Keys*, *Henry VIII and Anne Boleyn*, and *Il y en a Toujours un Autre*, which was purchased from the Chantrey Bequest fund became R.A. (1887)

Stothard, Thomas (1756-1834) Eng painter and engraver, was called by Turner the Giotto of England "Pilgrims Progress," *Robinson Crusoe*, and

many other works were illustrated by him became R.A. (1794)

Stow, John (1525?-1605) Eng chronicler and antiquary his chief works are *Annals of this Kingdom* from the Time of the Ancient Britons and *Survey of London*

Stowe, Harriet Beecher (1811-88) Amer novelist authoress of *Uncle Tom's Cabin* a story of slavery which did much towards abolition of slave trade

Strachey, Giles Lytton (born 1880) Eng essayist (Luminous Victorians, Queen Victoria) a keen and profound student of human character and brilliant stylist

Strachey, John St Lee (born 1860) Eng journalist proprietor and editor of the *Spectator* (From Grass to Flax, The Adventure of Living)

Stradivari, Antonio (1644-1737) It violin maker his (Cremona) violin is unique

Stratford, Thomas Wentworth, Earl of (1619-1641) Eng statesman became 1st earl of the county of North (1628), and Lord Deputy of Ireland (1633) impeached (1640) condemned and executed

Strathcona and Mount Royal, Donald Alexander Smith, Baron (1820-1914) Canadian politician 125

Strauss, Richard (born 1864) Ger composer under the influence of Wagner composed his tone poems *Don Juan* (1889) and *Die Verklärung* (1890) further development of his musical genius led to dark organic experiments in *Schadow* (1900) *Altra* (1909) and *Der Kreisler* (1911)

Stravinsky, Igor Fedorovich (born 1882), Rus composer wrote much for the ballet including *Petrushka* and *L'histoire du Soldat*

Strindberg, August (1849-1912) Swedish author and dramatist wrote *The Father* *Inferno* and many studies of Swedish life

Stringfellow, John, Eng inventor of model steam engine 338, 339

Stubbs, William (1822-1901) Eng historian and divine became Regius professor of modern history at Oxford (1865) Bishop of Chester (1884) and of Oxford (1889) his chief works are *Schickel's History of Constitutional History of England to 1485* (1875-78) and the editions of the chronicles of Benedict of Peterborough and Roger Hoveden published in the Rolls Series

Sturdee, Sir Frederick Charles Devonport, Bart. (1813-1925) Brit admiral present at the bombardment of Alexandria chief of war staff (1914-15) and defeated Ger squadron at Falkland Islands (1914) also commanded at Jutland, promoted admiral (1921)

Suckling, Sir John (1609-42) Eng poet and dramatist best remembered for his ballads and lyrics known as the Cavalier poet

Sudermann, Hermann (born 1857) Ger dramatist and novelist originally apprenticed to a chemist he studied history and philosophy at Konigsberg Univ became a journalist and succeeded with his first play *Die Ise* (1888) rapidly became foremost among Ger writers as a powerful delineator of human character *Plays* *Sadoma Lude* (1890) *The Joy of Living* (1902), and many novels

Sue, Marie Joseph Eugene (1804-57) Ir novelist his chief works are *Les Mysteres de Paris* (1842) *Le Juif Errant* (1844-45), and *Les Mysteres du Peuple*

Sullivan, Sir Arthur Seymour (1842-1900) Eng composer 1405

Sullivan, Barry (1821-61) Ir tragedian made his debut at Cork in 1840 and first appeared in London in 1852 (as Hamlet) subsequently played with success in Australia the U.S. and Canada among his best parts being *Faulstichbridge*, *Macbeth* and *Jaques* his last appearance was at Liverpool (1867)

Sully-Prudhomme, René François Armand (1839-1907), Ir poet, whose chief works are *Les Épreuves*, *Les Vaines Tendresses*, and other poems, and a translation of the *De Rerum Natura*

of Literature awarded Nobel prize for literature (1901)

Sumner, Charles (1811-74) Amer statesman and jurist, strong supporter of anti-slavery movement, delivered a powerful speech against war in 1846 (*The True Grandeur of Nations*) and in 1851 was elected U.S. senator

Sun Yat-sen (1866-1925) Chinese republican statesman, he led unsuccessful Canton rising in 1895, and fled from China, organized the revolutionary movement in 1911 and chosen provisional pres. of Chinese republic, he resigned in favour of Yuan Shih-kai whose election was more popular. After leading further revolts was elected pres. of Canton govt in 1921

Surrey, Henry Howard, Earl of (1789-47) Eng. courtier, soldier and poet, distinguished himself in 11 and Scot. but was tried and beheaded for treason on somewhat unsubstantiated charges. His works are chiefly songs and sonnets with Wyatt he introduced the Petrarchian sonnet form into Eng. poetry and was the first to use the scottish blank verse

Swinhoe, Malville (born 1870) Eng. novelist and popular story writer, clever delineator of life on Yorkshire moors (*A Man of the Moors*, *Richest of Withens*, *A Bitch for an Arcady*)

Sutra, Alfred (born 1863) Eng. playwright, his first plays *The Bulls of Jeroboam* and *Millicent on Women* were of the successful drawing-room type, but he reached a very high level of comedy in *The Perplexed Husband*, also translated many of the essays and symbolic dramas of Mitterlinck

Suvorov, Alexander Vassilovich (1729-1800) Rus. general, commanded in the Turkish war (1771-74) reduced the Turks (1783) and in the next Turkish war took Ismail (1790) after the peace of Passy was sent against Koenigsberg, his last campaign was against the armies of Napoleon in It. and Switzerland

Swan, Anne E., pen name of Mrs. Burnett Smith, Scot. novelist and short story writer, and journalist, popular contribution to *The Ladies' Home Journal*, World War she spoke extensively in Canada and U.S.A. on behalf of the Allies and did valuable V.M.C.A. work (*Gates of Eden*, *Hands Across the Sea*, *Amber at Home*)

Swedenborg, Emanuel (1688-1772) Swedish philosopher and religious mystic, occupied himself as a scientific calculator till 1733, from which time he began to write among his numerous works are *Arcana Caelestia*, *The Culture of Angels*, *Dei* and *The True Christian Religion*, he claimed direct revelation upon which he founded the New Jerusalem Church

Swift, Gustavus (1859-1901) founder of great Chicago meat packing industry

Swift, Jonathan (1667-1745) Eng. satirist, became intimate with the Tory leaders of the reign of Anne, conducted the *Tatler* and wrote pamphlets in their interest, became Dean of St. Patrick's (1713), his chief works were *The Tale of a Tub* (1704), *Gulliver's Travels* (1726-27) in which his scathing contempt for humanity found fullest expression and *The Drapier's Letters* (1729) *Journals to Stella*, *Battle of the Books*, etc.

Swinnburne, Algernon Charles (1837-1900) Eng. poet and critic, left Oxford without graduating and in 1860 published *Atalanta in Calydon*, besides this he wrote *Chastelard*, *Bothwell*

Mary Stuart, *Marino Faliero* and other tragedies, *Songs before Sunrise* (1871) which created a new epoch in Eng. poetry, *A Century of Roundels* and *Poems and Ballads* (three series) and among his prose works *Leaves and Studies* (1875) and *Miscellaneous* (1886) are estimates of Blake, Ford Ben Jonson, Shakespeare, and Victor Hugo

Symington, William (1763-1831), a pioneer of steam navigation 1846.

Symonds, John Addington (1840-93), Eng.

literary critic, for some time fellow of Magdalen College, Oxford, his chief work are *The Renaissance in Italy* (7 vols.), *Studies of the Greek Poets*, a translation of Benvenuto Cellini's *Autobiography*, *Walt Whitman a Study*, and some volumes of verse

Symonds, Arthur (born 1865) Eng. poet and man of letters, deeply influenced by the Symbolist movement, he was prominent in the period of the nucleus in literary London, editing the *Society Magazine*, his distinguished prose style is seen to best advantage in *Spiritual Adventures*, *Studies in Seven Arts*

Synge John M. (1871-1909) Ir. dramatist, a young man he lived a cosmopolitan life, after settling in Ireland began to write plays dealing with peasant life, his masterpiece *The Playboy of the Western World* reveals imaginative power equal to the greatest, he also wrote *The Shadow of the Glen*, *Deirdre of the Sorrows*, *The Riders*, *Wedding*

Taaffe, Eduard, Count (1833-95) Austrian statesman, became secretary to the Hungarian Govt (1857), Minister of the Interior (1867), Minister of War and Pres. of the Council (1869-70), as minister pres. in 1871 tried to unite Austrian nationalities and obtained the support of the Czechs

Tabari, Abu Ja'far Mohammed (839-923) Arabian historian, chief work is a *Chronicle* extending from the creation to his own time, also wrote a commentary on the Koran

Tasso, Pietro (died 1640) It. sculptor, studied under Giovanni da Bologna, masterpieces, the statues of Edmund III at Leith and of Philip IV at Madrid

Taenius, Gaius Cornelius (c. 120 B.C.) Rom. historian, married the daughter of the consul Agrippa (78) whose life he wrote, his *History of Germany* written in a concise epigrammatic style is invaluable for its record of life in central Europe in the beginning of the Christian era, only half of the *Historiae* have been preserved, but enough to throw much light on the early Rom. Empire

Taenius, Marcus Claudius (200-60 B.C.) Rom. emperor, was elected by the Senate on the death of Antioch (270) and as he was a cruel and many domestic vices, he tyrannized his subjects and led his army to victory over the Goths, when he died of exhaustion

Tait, Andrea (1811-94) Scotchman, first introduced into the art of designing in mosaic which he learnt from a Greek named Apollonio, who became his fellow worker at Florence

Taft, William Howard (born 1857) 27th Pres. of U.S.A. formerly a judge at Ohio, noted for his decision in business and political cases, as Sec. for War in Roosevelt's cabinet carried out important foreign negotiations, his popularity is Pres. declined following upon his tariff Acts (1910), after his defeat in 1912, he resumed the law and was appointed chief Justice of U.S.A. (1921)

Tagliacozzi, Gasparo (1546-99) It. surgeon, became professor of anatomy and anatomy in the Bologna Univ. renowned for his skill in restoring portions of the human face

Tagliioni, Maria (1804-85) It. ballet dancer, born at Stockholm, trained by her father, a famous ballet master, performed in Paris (1827-32), in 1836 appeared in London, her most notable performances were in Meyerbeer's *Robert le Diable* and as Tyrolienne in *William Tell*

Tagore, Sir Rabindranath (born 1861) Hindu poet and philosopher, the Maeterlinck of India, he founded an educational establishment at Bengal and devoted his life to it, visited Eng. several times and received Nobel prize for literature in 1913 knighted (1915) (*Song Offerings*, *The Crescent Moon*), *Nationalism*)

Taine, Hippolyte Adolphe (1828-93), Fr.

literary and art critic, became professor at the school of Fine Arts in Paris (1864), *History of English Literature* (1864), *The Origin of Contemporary France* (1875-85) etc. his style combines academic learning with original intelligence

Tait, Archibald Campbell (1811-1882) Eng. divine, studied at the Univ. of Glasgow and Oxford, opposed the Oxford Movement, was headmaster of Rugby (1842-50), Dean of (Irish) (1850-56) and Bishop of London from (1856), Archbishop of Canterbury (1868), *The Dangers and Safeguards of Modern Theology* (1861) etc.

Tait, Peter Guthrie (1831-1901) Scot. mathematician and physicist, educated at Cambridge, became professor of natural philosophy at Edinburgh (1860), a leading exponent of the mathematical method of quaternions and made valuable researches in kinematics and dynamics, wrote with Lord Kelvin *Treatise on Natural Philosophy* and many scientific papers

Talbot, John, Earl of Shrewsbury (1373-1433) Eng. soldier, was the son of Richard Lord Talbot of Goodrich Castle in Herefordshire, distinguished himself in Flanders in the reign of Henry V, took part in the siege of Orleans (1429-30), recovered Harfleur (1410), known as Talbot our good dog, owing to his fighting qualities

Talbot, William Henry Fox (1800-77) Eng. man of science, discovered independently of Daguerre the art of taking pictures by the sun and devised a method of instantaneous photography

Talfourd, Sir Thomas Noon (1795-1854) Eng. lawyer and man of letters, born at Reading, was called to the Bar (1821), represented Reading as a Whig (1835-41 and 1847-49) and was author of the Copyright Act of 1842, in recognition of this Dickens dedicated *Pickwick Papers* to him (*Don a tract*, *Memoirs of Charles Lamb*)

Talleyrand-Périgord, Charles Maurice de (1754-1838) Ir. statesman, the son of a nobleman, he became lame through an accident in childhood and yielded his succession to a younger brother, on the death of the latter, he gave up order (1791) during the Revolution, suspected by the extremists, he fled to Eng. returning in 1797 to become Napoleon's Foreign Minister, his foresight and diplomacy enabled him to keep in office under emperor or King, and he established friendly relationships with all but

Tallien, Jean Lantier (1787-1820) Fr. revolutionist, after conducting a Jacobin journal called *L'ami des citoyens*, became one of the most sanguinary spirits of the Convention, spurring the life of Therese de Fontenay (Our Lady of Thermidor) he became under her in financial more moderate and changing his views took part in the overthrow of Robespierre

Tallis, Thomas (1517-85) Eng. musician, the father of Eng. cathedral music, dismissed from his post as organist at Waltham Abbey on the dissolution of the monasteries (1540), he was appointed gentleman of the Chapel Royal and devoted himself to the cause of Eng. music, he composed music for *Te Deum Gloria in Excelsis the Latin* etc.

Taine, François Joseph (1783-1826) Ir. tragic actor, starting as an amateur, he achieved his first great success in *Chimeras* (*Charles IV*) a play which reflected the rising republican feeling of the time, he founded the *Theatre de la République* and like Kemble in Eng. played classical parts in appropriate costume for the first time

Taine, Thomas de Witt (1832-1902) Amer. Presb. preacher, his churches were three times burned and rebuilt, each time larger, he was editor of the *Christian Herald* (1890-1902) (*Every Day Religion*, *The Pathway of Life*)

Tamayo y Baus, Manuel (1822-98) Sp. dramatist, his most popular piece, *Lancers de Honor* was an attack on the practice of duelling in *Un drama escrito*

TANCRED

(1867) he introduced Shakespeare and Yorick as characters *Virginia* (1858)
La Rocaembra (1854)
Tancred (1078?-1112) Norman Sicilian hero of the first crusade son of the Marquis Eudes and Emma sister of Robert Guiscard. The chronicles represent him as the personification of all knightly virtues and he is one of the heroes of Tasso's *Jerusalem Delivered*
Tangye, Sir Richard (1833-1906) Eng manufacturer intended for an agricultural career he broke his arm as a farm boy and became a clerk in Birmingham with two brothers started an engineering firm and in 1856 went into the hardware business as well the Tangye firm built the hydraulic lifting jacks used in launching the *Great Eastern* steamship and they originated the Saturday half holiday
Tannahill, Robert (1774-1810) Scot song writer disciple of Burns was born at Paisley where he followed the trade of a weaver writing his verses at the loom (*Jessie the Flower o' Dunblane*) London: Bonnie Wood, and Braes etc)
Tanner, Thomas (1674-1735) Eng antiquary educated at Oxford Bishop of St Asaph (1732) *Notitia Monastica* a description of the religious houses of Eng and Wales (1695) and *Bibliotheca Britannico-Hibernica* (1748) his collection of MSS is in the Bodleian Library Oxford
Tantia Topi (1819-59) the lieutenant of Nana Sahib in the Indian Mutiny said to have instigated the massacre of Cawnpore kept up the struggle after his master's flight but was caught in April 1859 tried and executed
Tarkington, Booth (born 1889) Amer novelist best known as author of *Monsieur Beaucaire* the stage version of which achieved wide success, produced much best class fiction (*The Beautiful Lady* *The Turnout* *The Gentleman from Indiana*)
Tarleton, Richard (died 1688) Elizabethan actor and dramatist born at Conover in Shropshire according to Stowe he came one of the queen's playboys (1683) *(The Seven Deadly Sins)*
Tartaglia, Niccolo (1500-59) It mathematician after terrible suffering, during the sack of Brescia (1512) which left him crippled he became a teacher and discovered the solution of cubic equations wrote treatises on gunnery partly working out theory of the trajectory
Tartini, Giuseppe (1699-1770) It musician became leader of the orchestra in the church of San Antonio at Pisa (1721) he composed numerous concertos and sonatas including the famous *Devil's Sonata* discovered Tartini's tomb, curious phenomenon in acoustics
Tasman, Abel Janszoon (1603?-9) Dutch navigator sent from Batavia by Van Diemen gov of the Dutch Indies (1642) on an exploring expedition in the course of which he discovered Van Diemen's Land now called Tasmania and many islands in the Pacific
Tasso, Torquato (1544-95) It poet studied at the Univ of Padua where he published his earliest poem *Rinaldo* (1562) imprisoned by Alfonso (1577) in a convent from which he escaped he returned to Ferrara but was confined in a madhouse where he remained till 1586 Clement VIII summoned him to Rome (1594) to receive a laurel crown but he died soon after his arrival (*La Gerusalemme* epic of the first crusade *Aminta* pastoral drama)
Tate, Sir Henry (1819-89) Eng merchant and patron of the arts invented a machine for cutting sugar loaves into small cubes and made a fortune as a sugar refiner besides giving benefactions to hospitals public libraries and universities he built the art gallery at Millbank which bears his name
Tate, Mahum (1652-1715) Eng poet, born in Dublin succeeded Shadwell as poet laureate (1692) joint author with Dr Brady of a metrical version of the Psalms, he bowdlerized Shakespeare, ending *King Lear* with the marriage of Cordelia and Edgar

Tauchnitz, Karl Christoph (1761-1836) Ger publisher famous for his editions of classical authors His nephew Baron Bernhard Tauchnitz (1816-1895) began in 1841 his well known series of British Authors
Tauler, Johann (1300-61) Ger mystic entered the Dominican order studied at Paris under Eckhart and afterwards came under the influence of Nicholas of Basel His sermons denouncing the abuses of the age amongst the earliest compositions in the Ger tongue
Taunton, Henry Labouchere, Baron (1796-1869) Brit politician represented Taunton (1830-59) was Pres of the Board of Trade in 1846 and 1855, became Sec for the Colonies (1854), raised to the peerage (1859)
Tausen, Hans (1494-1561) Dutch reformer the founder of Danish Protestantism under the influence of Luther (1521) preached the doctrines of the Reformation for which he was imprisoned was patronized by Frederick I who made him his chaplain (1528)
Tavaunne, Gaspard de Saulx de (1504-73) marshal of Fr active opponent of the reformed doctrines suppressed several Protestant writings took a prominent part in the battles of Jarnac and Montcontour (1569) is said to have instigated the massacre of St Bartholomew
Tavernier, Jean Baptiste (1605-89) Fr traveller of Dutch origin several times visited Turkey Persia and the East Indies and amassed great wealth as a trader in jewels was ennobled by Louis XIV (1669) director of East India Co (1687)
Taylor, Bayard (1825-78) Amer man of letters published several works of travel poetry stories of Amer life and a translation of Goethe's *Faust* (1870-71) appointed US minister at Berlin (1878) (*Poems of Home and Travel* *Waves Aloft*)
Taylor, Brook (1683-1731) Eng mathematician educated at Cambridge was sec. of the Roy Soc (1714-18) published several mathematical works and was the inventor of Taylor's theorem
Taylor, Sir Henry (1800-86) Eng man of letters became in 1824 a clerk in the Colonial Office for which he retired in (1872) his dramas are Elizabethan in style *Philip van Artevelde* (1834) *Francis Comenens* (1828) and *Edwin the Law* (1842)
Taylor, Isaac (1787-1885) Eng man of letters belonged to a celebrated literary family in his tract for the Times attacked constitution of Church sustained by parliament *The Spiritual History of Lutheranism* (1825) *Spiritual Despotism* (1833)
Taylor, Jeremy (1613-87) Eng divine and author after studying at Cambridge he attracted the attention of Archbishop Laud who presented him to a fellowship at Oxford (1636) afterwards became chaplain to Charles I he was a popular and eloquent exponent of the religious side of the Puritanism works include *Rules and Exercises of Holy Living and Dying* (1650-51) *The Liberty of Prophecy* (1648) *Doctor Dubitantium* (1660) and his sermons
Taylor, John (1580-1633) Eng the Water Poet born at Gloucester served in the expedition of Essex to Cadix (1596) afterwards became a waterman on the Thames he achieved a reputation by doggerel rhymes and eccentric journey *See Jenson, Ben*
Taylor, Rowland (died 1555) Eng Prot martyr chaplain to Cranmer who presented him to the Rectory of Hadleigh Suffolk was a supporter of Lady Jane Grey after two trials before Gardiner he was burnt at the stake
Taylor, Tom (1817-80) Brit dramatist and editor of *Punch* he wrote in his leisure time during posts as professor of Eng literature at London Univ lawyer and gov official and had a hand in many contemporary plays (*The Ticket of Leave Man* *Lady Clancarty* (with Charles Reade) *Masks and Faces*)

TENISON

Taylor, Zachary (1784-1850) Amer general distinguished himself in the war with Mexico (1846-47) elected 12th Pres of the US (1850) but died four months after his inauguration
Tchernaisky, Michael Gregorovich (1858-98) Rus general sent against Khokim (1883) marched with 1000 men across the steppes of Turkestan and took Tashkent (1885) gov of Tashkent (1882)
Tegethoff, Wilhelm, Baron von (1811-71) Austrian admiral commanded the Austrian squadron in the Danish war (1864) and gained victory off Heligoland defeated the It under Pershing at Lissa (1866) commander in chief of Austrian navy (1869)
Tegner, Esaias (1782-1846) Swedish man of letters, professor of Grk in the Univ of Lund (1812) and Bishop of Abo (1824) *Enthosias* (1820) *Alf* a romance (1821) the children of the Lord's Supper (1817) for his song to the Sun (1817)
Tegnum John Shore, Lord (1751-1834) Brit statesman went to India as a cadet (1769) member of the Supreme Council of Calcutta (1786) and was Gov Gen (1793-98) when he was created a peer first privy of the Brit and Foreign Libs Society
Tenison, de Mattos, Alexander Louis (1861-1921) scholar and translator settled in Eng in 1874 as correspondent for several Dutch papers and is editor and dramatic critic of *The Times* was head of the War Trade Intelligence Dept (1911-18) his permanent contributions to literature include translations of Maeterlinck *Fabry* 1901 etc
Telles, Bernardino (1509-55) It patriot studied at Milan Rome and Padua attacked the schoolmen maintained the necessity of basing philosophy on the study of nature established a school at Naples prepared the way for Bacon and Descartes (*De Rarum Natura*)
Telford, Thomas (1757-1834) Scot engineer 677
Tempelhof, Georg Friedrich (1737-1807) Ger soldier commanded Prussian artillery during early part of the revolutionary war with Fr afterwards military tutor to the brothers of Frederick William III wrote the *Prussian Militairik* (1792) and *History of the Seven Years War* (1785)
Tempest, Marie (born 1866) Eng actress popular exponent of light comedy her first success was *Becky Sharp* (1901) she toured in Amer and Australia with great success and maintained her popularity in Eng
Temple, Frederick (1826-1902) Eng divine became headmaster of Rugby (1848) appointed Bishop of Exeter (1863) and of London (1868) (*On the Education of the World* 11 Essays and Reviews (1860) which created a sensation account of alleged orthodoxy views)
Temple, Sir Richard, Bart (1816-1902) Eng civil servant Lieut Governor of Bengal (1871-77) Governor of Bombay (1877-80) where he did good work in various periods acted as chairman of the London School Board (1895) wrote *Men and Events of My Time in India* (1885) etc
Temple, Sir William (1628-99) Eng statesman after studying at Cambridge travelled in France Holland and Ger on his return (1654) sat in the Irish parliament negotiated the Triple Alliance (1668) took a leading part in the negotiations which led to the treaty of Nimwegen (1678)
Temple, David (the Elder) (1742-1849) Flemish painter studied under Rubens and afterwards in his pictures for the most part represent village festivals groups in taverns and similar scenes
Temple, David (the Younger) (1610-60) son and pupil of the preceding chose the same class of subjects as his father whom he excelled
Tenison, Thomas (1836-1915) Eng divine educated at Cambridge became vicar of St Martin's in the Fields (1890),

where he endowed a free school and reported the Protestant cause during the reign of James II. Archbishop of Canterbury (1694) **Tenniel**, Sir John (1820-1914) Eng. political cartoonist and book illustrator began to contribute to *Punch* (1851) his illustrations in *Alice in Wonderland* and in unrivalled for charm and expression.

Tennyson Alfred Lord (1809-92) Eng. poet 1031

Tenness (1957-1958) Rom. comic poet said to have been the slave of a Roman senator who granted him his liberty among his comedies which are free translations of those of the Gr. dramatists including Menander are *Andria*, *Heautontimorumenos* and *Phormio*. Tenness was no mere copyist although he stole his plots from the Greeks.

Tenniss, William (1847-97) Eng. actor after a varied career as sheep farmer, tax collector and in the merchant service he achieved success on the stage in *I. W. Robertson's* *Scotch* (1866) associated with Henry Irving at the Lyceum and produced *The Harbour Lights* (melodrama) at the Adelphi Theatre. He was assassinated by an assassin.

Terry Ellen (born 1849) Eng. actress 75 **Tertullian** (c. 150-220) collector of the Latin lit. born at Carthage where he founded a heretical sect in the 2nd century. His conversion to Christianity was a powerful defence of Christianity paved the way for Augustine.

Tetrazzini Louis (born 1874) It. singer 985

Thackeray William Makepeace (1811-62) Eng. novelist and journalist was educated at the Charterhouse and Cambridge. Studied at law in 1837. He came to London with *Fraser's Magazine* to which he contributed the *Great Expectations* in 1842. He wrote *The Virginians* in which appeared his first novel *Beatrice* (1846-48) was followed by *Pendennis* (1849-50) *Canterbury Tales* (1849-50) *The Newcomes* (1850-51) *Henry Esmond* (1856) and *The Virginians* (1859) which with Dickens as delineator of character.

Thales (c. 625-546 B.C.) Gr. philosopher born at Miletus one of the seven sages. He taught that all things have their origin in water. Observed electrical qualities of amber.

Themistocles (c. 494-429 B.C.) Athenian statesman and naval commander directed the fleet of Athens in the battles of Artemisium and Salamis (480 B.C.). He also lured the Persian navy into the Bay of Salamis and there annihilated it. He developed imperial resources of Athens by sea power.

Theocritus (c. 300 B.C.) Gr. pastoral poet. He collected songs and poems in the rough Doric dialect and gave them a new literary form. Virgil owed much to his idylls.

Theodoric the Great (454-526) origin ally chieftain of a tribe of Ostrogoths. He overthrew Odoacer (476) and established the Ostrogoth kingdom in Italy. He sought to consolidate by effect the union of Goths and Italians and was much to promote the arts.

Theodosius was a peace lover.

Theodosius the Great (346-395) Emperor of Rome in 379 the Emperor part of the Roman ruler over the western part of the empire after deposing his throne (395) he was restored to successor of his nephew the brother and nephew of the emperor who had been exiled sole ruler by Maximian. He was recognized (395) over the Roman world paganism and prohibited.

Theophrastus (372-287 B.C.) Gr. philosopher born in Eresos (372 B.C.) Gr. philosopher under Plato and Aristotle studied in Athens succeeded as head of the Lyceum whom he called (322) his chief the peripatetic character depicting the work of human nature various types.

Thesus (5th cent B.C.) Gr. poet a native of Mount Icaria in Attica introduced

a masked actor who conversed with the chorus at the Dionysiac festivals thus was the first step in the development of Gr. tragedy.

Thierry, Jacques Nicholas Augustin (1795-1856) Fr. historian born at Blois was the first step in the development of Gr. tragedy. He was the first step in the development of Gr. tragedy.

Thiers, Louis Adolphe (1797-1877) Fr. statesman studied law at Aix in 1821 removed to Paris where he became a journalist wrote *Historie de la Revolution Francaise* (1821-37) started the *Nationale* (1830) and did much to wards raising Louis Philippe to the throne at first opposed to the Revolution he became first pres. of the republic.

Thomas, Albert (born 1878) Fr. politician he was originally a disciple of Jaures the socialist leader came into prominence as Minister of Munitions during the World War increasing daily supply of shells from 13,600 to 212,000 an ardent supporter of the League of Nations.

Thomas, Brandon (1859-1914) Eng. actor and playwright author of *Charles and Mary* was a shipping clerk before joining the stage with John Hare (1877) *Swirls in a Doublet* *Women are so Serious*.

Thomas, James Henry (born 1878) Brit politician originally in engine driver in 1914 his public career as member of the Swinton council pres. of the National Union of Railwaymen (1910) and in the same year entered Parl. as Labour member for Derby. Privy Counsellor (1917) Pres. of the Trade Union Congress (1920) Sec. of the Colonies in first Labour Govt (1924).

Thompson Francis (1849-1907) Eng. poet his early mind was possessed in severe privation aggravated by the opium habit. He lived in London and sold matches in the London streets. Two poems written on scraps of paper arrested the attention of Alfred Mayhew editor of *Melrose Magazine* who offered the poet (The Hound of Heaven) unique for its influence of imagery and intensity of spiritualism wrote many poems about children and essays on the poets.

Thompson, Silvanus Phillips (1831-1916) Eng. scientist became principal of the City and Guilds Technical College (1888) the foremost physicist of his age he made valuable researches in electricity (Dynamo electric Machines) *Life of Lord Kelvin*.

Thomson, James, father of Lord Kelvin 421

Thomson, James (1700-48) Scot. poet was educated at Edinburgh and Edinburgh Univ. went to London in 1725 and there published his *Sonnets* after the death of his patron he tried to support himself by writing for the stage. In one of his plays the song *Rule Britannia* appears (The Castle of Indolence).

Thomson, James (1822-92) Brit physicist and engineer an elder brother of Lord Kelvin he worked much under his direction but also made independent researches invented improved water turbines and a vortex water wheel.

Thomson, James (1841-82) Brit poet born at Port Glasgow was brought up at the Caledonian Orphan Asylum and became a schoolmaster in the army contributed to the *National Reformer* (1860-1870) in which was published his *City of Dreadful Night* (1874) a profoundly melancholy and pessimistic poem but written with great imaginative power.

Thomson, John Arthur (born 1861) Brit scientist and journalist regius professor of natural history at Aberdeen (1899) in collaboration with Prof. Patrick Geddes he wrote popular treatises on evolution biology etc. and became well known as a journalist on scientific topics (*The Bible of Nature*), editor of *The Outline of Science*.

Thomson, Sir William See Kelvin, William Thomson, Baron

Thomson, Henry David (1817-1862) Amer

naturalist and essayist was a friend of Emerson and a member of the Transcendental School in 1845-47 he lived a life of complete solitude described in *Walden* (1854) birds beasts and fishes ceased to fear him (*Excursions*) *The Marsh Woods*.

Thornike, Sybil (born 1885) Eng. actress, notably successful in revivals of Gr. drama during her arduous apprenticeship she played 100 parts in 25 plays, first became prominent at the Old Vic, Waterloo Road in Shakespearean repertory and in Grand Guignol plays at Little Theatre.

Thorne, Will (born 1867) Brit politician and labour leader at the age of 43 he worked as a barber's assistant helped to found National Union of General Workers of which he became sec. in (1899) M.P. for West Ham (1906) and Mayor (1917-18).

Thornhill, Sir James (1673-1734) Eng. painter after educating himself in Eng. travelled in Holland and France commissioned by Queen Anne to paint the dome of St. Paul's decorated the refectory and saloon of Greenwich Hospital and some of the rooms in Hampton Court.

Thornycroft, Sir W. Hume (born 1850) Brit sculptor first exhibited at the Royal Academy (1871) executed statues of Artimus (1880) and Teucer (1881) the Gordon statue in Trafalgar Square is the best example of his style.

Thorvaldsen Bertel (1770-1844) Danish sculptor of Icelandic origin studied at the free school of the Academy of Copenhagen and was sent by that body to Rome (1794) his first great statue was his Jason (1809) best known for his imitations of Gr. mythological statuary and for his marble relief *Night and Morning*.

Thrale, Hester (1741-1821) Eng. woman of letters wife of Henry Thrale a brewer after his death she married Piozzi in 1771. Her husband was the director of Dr. Johnson whose intimate friend she was she formed an interesting literary circle in the 18th cent. London and was a keen writer cultured woman.

Thucydides (about 460-400 B.C.) Gr. historian born at Athens said to have been descended from Olorus king of Thrace at the outbreak of the Peloponnesian war he received a command but failed to relieve Amphipolis which besieged by Brasidas and was banished (424 B.C.) after 20 years of exile during which he wrote his *History of the Peloponnesian War* he returned to Athens about 403.

Thurston, Ernest Temple (born 1870) Eng. novelist and playwright an attractive stylist and student of human character his best novel is *Balls* Bishop a classic of its kind *The City of Beautiful Senses* *The Garden of Resurrection* *The Greatest Fish* (play).

Tiberius (Tiberius Claudius Nero) (42 B.C.-A.D. 37) Rom. emperor stepson of Augustus distinguished himself in the war was during the lifetime of Augustus whom he succeeded in A.D. 14 he played all power in the hands of his favourite, Sejanus whom he afterwards put to death retired to the island of Capri where he was said to have indulged in gross free living assassinated by a soldier.

Tolkien, George (1901-1971) Amer. literary historian travelled in Europe (1815-19) was professor of modern languages at Harvard (1819-34) he wrote a *History of Spanish Literature* (1849) and a *Life of Prescott* (1864) he helped to establish the Boston public library.

Tönnies, Johann Ludwig (1778-1863) Ger. author and critic born in Berlin studied at Halle and Göttingen formed a friendship with A. W. von Schlegel whom he assisted to translate Shakespeare and became a leader of the Romantic school he was director of the Dresden theatre (1825-41), when he was invited to Berlin by Frederick William IV. *St. Genoveva* (1800) and *The Emperor Octavian* (1804) (dramas) Tales some of which were translated by Carlyle, *Phantoms* (1812-17).

Tillet, Benjamin (born 1860), Eng. politi

can and labour leader after serving in the naval mercantile service he came a docker entered Parl (1917). Firm Sec of the Dock Wharf Riverside and General Workers Union his advocacy of Britons war aims helped to secure Labour's cooperation in 1914.

Tillotson, John (1680-94) Eng ecclesiastic son of a Yorkshir clothier was brought up as a Calvinist conformed to the Church of Eng at the Restoration opposed Charles II's attempts to make concessions to the Roman Catholics (1672) after the Revolution was made Archbishop of Canterbury (1691) ("sermons").

Timoteo II (Jacopo Robusti), (1616-94) Venetian painter obtained his title from the fact that his father was a dyer (*tintore*) studied under Titian and also modelled his style on that of Michelangelo the *Miracle of the Slave* in the Academy of Venice, considered his masterpiece.

Tinworth, George (1816-1913) Eng artist and potter's designer.

Tipu Sultan (1750-99) Sultan of Mysore was the son of Hyder Ali whom he succeeded (1782) assumed the title of Sultan (1784) carried on struggle against the Eng intermittently till 1792 when he was forced by Lord Cornwallis to sue for peace slain whilst defending his capital of Srirangapatnam (1799).

Tirpitz Alfred von (born 1849) Ger admiral from 1898 when he was Minister of State began to create a navy to challenge Brit supremacy of the seas inaugurated ruthless submarine campaign during World War which brought about his downfall.

Titian (Tiziano Vecellio) (1477-1576) Venetian painter 1583.

Titus Flavius Vespasianus (A.D. 40-81) Rom emperor reigned until his father Vespasian in Syria and after the return of the latter to Rome brought the Jewish war to a close by his capture of Jerusalem (70) he succeeded Vespasian (79) and showed himself a wise and beneficent ruler.

Toqueville, Alexis Charles Henri Clarel de (1805-59) Fr politician and author born at Vermont visited America (1831-32) and after his return published *Democracy in America* the first philosophical and scientific study of democratic institution was Minister of Foreign Affairs (1849).

Todhunter, Isaac (1820-84) Eng mathematician was educated at Cambridge where he became fellow of St John's College famous for his concise lucid text book on Euclid algebra etc.

Togo, Makashiro, Count (born 1847) Jap sailor after training in the Jap navy he spent some time at R.N. College Greenwich became rear admiral during Chinese war (1894) and commander in chief at outbreak of Russo Jap war when he destroyed the Rus fleet in Port Arthur.

Tolstoy, Count Leo Nikolasevitch (1828-1910) Rus author and social reformer 81.

Toole, John Lawrence (1832-1906) Eng actor he left his employment with a London wine merchant to go on the stage and rapidly became the leading comedian of his day created character of Paul Pry and many humorous and pathetic impersonations one of the last being *Walter London* managed Toole's Theatre (1882-93).

Topsaday, Augustus Montague (1740?-78) Eng clergyman and hymn writer preached in the Fr Protestant Chapel Lincoln's Inn fields his Calvinist views led him to attack Wesley his world famous hymn 'Rock of Ages' was composed while sheltering from a thunder storm in a cleft of limestone rocks on the Mendip Hills.

Torquemada, Juan de (1388-1468) Sp cardinal and theologian opposed the followers of Wycliffe and Huss at the Council of Basel (1431) and tried to reconcile the Gk and Rom Churches to that of Florence (1439) became Bishop of Sabina (1464).

Torquemada, Tomas de (1420-98), Sp

inquisitor organized the Inquisition the extreme severity of his regulations placed him in danger of his life but he retained his position for eleven years condemning 2 000 people to be burned.

Torrans, William Torrans McCullagh (1813-94) Brit politician an associate of Cobden he first entered Parl in 1847 was instrumental in passing the Artisan Dwellings Bill helped to establish the London School Board and introduced measures for clearing slum areas.

Torricelli, Evangelista (1608-47) It mathematician part inventor of the mercurial barometer the Torricellian vacuum was the friend of Galileo whom he succeeded as professor at Florence.

Torrigiano, Pietro (1470?-1522) It sculptor born at Florence was a fellow student of Michelangelo whose nose he broke in a quarrel entered the service of Henry VIII and executed the tomb of Henry VIII in Westminster Abbey.

Torrington, George Byng, 1st Viscount (1663-1733) Eng admiral distinguished himself in actions against pirates in the Indian and the Gulf of Ireland (1706) he induced the fleet to support the Prince of Orange completely defeated the Sp fleet off Cape Passaro (1718).

Tortensson, Lennart Count (1803-51) Swed soldier commander in chief of the Swed forces in the Thirty years war crushed the Danes (1645) and defeated the Imperials at Jankowitz (1645).

Tosti, Sir Francesco Paolo (1846-1916) It Brit composer settled in London (1880) as singing teacher to Brit royal family and became naturalized his most famous songs are 'Good bye Mother' and 'For I ever'.

Tournear, Cyril (1875-1926) Eng dramatist author of *The Reckless Tragedy* (1907) and *The 4th of 7 Tragedy* (1912) tragedies which surpass in horror of iniquity and profusion of ghastly incidents all other compositions of their time but were praised by Hazlitt and Charles Lamb.

Toussaint L'Ouverture, Pierre-Dominique (1748?-1803) W Indian negro liberator son of African slaves he was in 1796 appointed by the Imperialist chief of the army of San Domingo and ruled the island with justice and vigour resisted Napoleon's attempt to restore slavery, but was captured and died in prison.

Townley, Charles (1737-1805) Eng collector and antiquary during a long residence in Rome formed a collection of antiquities known as the Townley Marbles purchased after his death by the Brit Museum.

Townshend, Charles (1722-67) Eng politician as Chancellor of the Exchequer under Chatham (1766) was responsible for the taxation of the Amer colonies which led to the War of Independence.

Townshend, Sir Charles Vere Ferrers (1881-1924) Brit general first saw service in the Sudan transferred to Indian army he fought gallantly at Chitral rejoining Eng army he served in 1914 War headed Mesopotamian division during World War when after several victories he was besieged in Kut for five months and taken prisoner.

Toynbee, Arnold (1824-83) Eng political economist fellow and tutor of Balliol College Oxford took a deep interest in the welfare of the labouring classes and lived much amongst them in the Last Lad of London Toynbee Hall in Whitechapel founded after his death.

Traill, Henry Duff (1842-1900) Eng journalist contributed volumes on 'Stern and Coleridge to the English Men of Letters' series edited Social England wrote 'The New Lucian'.

Trajan (Marcus Ulpius Trajanus) (53-117), Rom emperor, born in Sp adopted son of Nervus whom he succeeded (98) was victorious over the Dacians (101-5) and extended the Rom Empire to the East.

Tree, Sir Herbert Beerbaum (1853-1917), Eng actor 579.

Treitschke, Heinrich von (1834-90), Ger historian one of the chief inspirers of

Ger imperialism he preached the gospel of force founded on autocracy which led to the World War (History of Germany in the Nineteenth Century).

Trelawney, Edward John (1792-1891) Cornish sailor and man of letters entered the navy when eleven years old his early career is recorded in his *Adventures of a Younger Son* he afterwards became the friend of Shelley and Byron and wrote *Recollections of the poets*.

Trelawny, Sir Jonathan (1650-1721) Eng politician one of the seven bishops whom James II imprisoned for signing the petition against second declaration of indulgence (1688) hero with his grand father of the refrain 'And shall Tre-lawny die'.

Trenck, Friedrich, Baron von der (1720-94) Prus officer famous for his prison adventures narrated in his *Memoirs* (1796-87) he was guillotined during the Fr Revolution.

Trevelyan, Sir George Otto, Bart (born 1839) Brit statesman and author nephew of Lord Macaulay entered Parl as a Liberal (1865) in Sec (1885-94) during troubled times ("Lift and Letters of Lord Macaulay" The July Times of Charles James Fox).

Treves, Sir Frederick (1822-1924) Eng surgeon successfully operated upon King Edward VII for appendicitis he acted as surgeon to the Brit army during the Boer War (1891-1902) and was largely instrumental in forming the I.C.S.S. Society (a system of Surgery Physical Education).

Trevithick, Richard (1771-1833) Lux engineer 1009.

Trevelyan, Charles (1832-96) Gt politician was appointed Minister of Foreign Affairs (1864) has several times been Prime Minister developed railways and roads in Greece and kept peace with Turkey.

Tristan da Cunha (early 16th cent.) Port navigator set out from Lisbon (1506) discovered in 1506 the island group in the Atlantic ocean which bears his name.

Trollope, Anthony (1815-82) Eng novelist educated at Winchester and Harrow entered the Post Office (1834) his duties as travelling inspector gave him leisure to write his early efforts failed but he subsequently made £20 000 in 20 years his stories of life in a cathedral town and of civil service remarkable for their clever and truthful characterization ("Barchester Towers" "The Claver House" "The Three Clerks" and many others).

Tromp, Martin Harpertsoon (1597-1639), Dutch sailor defeated a large Sp fleet (1639) was directed by Blake in May (1632) but gained a victory over him in the following November at Dunbar sailing up the Thames with a roomy fleet to the mouth 128-127.

Trotsky, Leon (born 1879) Rus Politician assumed name of Leon Bronstein revolutionary leader and co partner with Lenin in revolt against Czarism and formation of Soviet govt (1917) during Tsarist regime he was twice banished to Siberia and twice captured ("The Defeat of Terrorism").

Troubridge, Sir Ernest Charles Thomas (born 1865) Eng sailor commander of Mediterranean squadron and was court-martialled for permitting escape of the *Gorda* and *Breda* but fully exonerated head of naval commission to Serbia (1918) and pres of Inter national Danube Commission.

Trowbridge, Professor John, Amer pioneer of wireless telegraphy 2.

Trumbull, Jonathan (1710-85) Amer statesman gov of Connecticut intimate friend of Washington whose frequent remark 'Let us hear what Brother Jonathan has to say' is said to have given rise to the nickname applied to the Amer people.

Tschaikevsky, Peter Ilyich (1840-93) Rus composer encouraged by Rubenstein he left a legal post and entered the St Petersburg conservatoire (1863) Prof of Harmony at Moscow his patron a wealthy lady whom he never met supported him for many years his orchestra

works the six symphonies including the famous *Pastorale* the 1812 overture *The Sleeping Beauty* ballet and (see *Yvette*) suite are widely popular
Tsang Ki-Tsuh (1837-1890) Chinese diplomat, was appointed ambassador to London and Paris (1878) he took a prominent part in regulation of opium traffic

Tsang Kuo-Fan (1811-72) Chinese soldier leader of the ever victorious army which quelled the insurrection of the Taipings (1850) he was afterwards sent to crush the Nienjen rebellion but failed and was replaced by his lieutenant

Tsao-Hsu (1811-1908) Chinese Empress Dowager she ruled China for 40 years steadfastly resisting change and progress encouraged the Boxer movement (1900)

Tunstall, Outhbert (1474-1559) Eng prelate studied at Oxford (Cambridge and Padua) one of the most learned scholars of his age under Henry VIII he became successively Bishop of London (1522) and Durham (1530) deprived of his mitre during the reign of Edward VI he was restored on the accession of Mary but again deprived by Elizabeth

Tupper, Sir Charles (1821-1915) Canadian statesman born in Nova Scotia was in 1883 appointed high commissioner in Gt Brit for the Dominion of Canada and successfully obtained a loan for the Canadian Pacific Railway

Tupper, Martin Farquhar (1810-80) Eng author noted for his *Proverbial Philosophy*, a volume of common place moral sayings in blank verse which achieved a phenomenal success

Turenne, Henri de la Tour d'Auvergne, Viscomte de (1611-74) 1st general grandson of William I Prince of Orange entered the 1st army (1630) placed in command of forces in Gt Brit during the Thirty Years war (1648) distinguishing himself by his retreat from Marston and his victory at Nordlingen (1644) one of the greatest strategists of all time he was the idol of Napoleon

Turgenev, Ivan (1818-83) Rus novelist sprung from a noble but impoverished family of later origin he was educated in Moscow and Berlin a minor political officer resulted in his imprisonment for one month and two years banishment to his estate he voluntarily exiled himself from Rus and lived either in Baden or Paris his writings imparted a cosmopolitan air to his otherwise characteristically Russian stories of peasant life (1 others in *Children Smoke* (1 others in *Virgin Soil*)

Turgot, Anne Robert Jacques (1727-83) 1st statesman was introduced to Louis XVI (1761-74) where he introduced improvements in the administration became Comptroller in chief of finances (1774) made the first attempt to avert 1st Revolution by combining vested interests and taxing privileged classes

Turner, Joseph Mallord William (1775-1841) Eng landscape painter son of a tradesman in Covent Garden after selling drawings at a shilling each he studied at the school of the Royal Academy (1790-94) R.A. (1799) R.A. (1804) his genius for imaginative colouring and painting the unimportant did not develop until late in life when Ruskin made a cult of him he died a hermit but immensely wealthy (*Dido Building Carthage* (*Crowing the Brook* (*Rain Steam and Speed* etc)

Tussaud, Maria (1760-1830) Quaker wax modeller she learned her art in Paris and with her uncle modelled many pelagians of prominent characters in the cause of revolution and collected relics opened a exhibition of wax works in *Miracle pagania* (1784) the building and exhibits **Theophrastus** (*strove by the* (1921)

sophier bore-ly, pseudonym of Samuel Lang under Platiemens (1835-1910) Amer succeeded as born at Florida in Missouri school (322) ... living is composer of human nature ... he removed to New Theophs (6th cent BC) he published his of Mount Ioanis in The innocents tablished his repu

lation for humour although serious thought underlies all his work (*Tom Sawyer* " *Huckleberry Finn* " *A Tramp Abroad*)

Twiss, Horace (1787-1840) Eng barrister and author sat in Parl (1828-32) wrote a *Life of Lord Eldon* and contributed the first parliamentary summary to *The Times* a noted wit of his age

Twiss, Sir Travers (1809-97) Eng jurist was educated at Oxford became a Queen's counsellor (1867) and was Queen's Advocate (1867-72) gave up politics to study international law and wrote standard works (*Law of Nations in Peace and Law of Nations in War*)

Tycho Brahe see Brahe, Tycho
Tyler, John (1790-1862) Amer statesman entered Congress (1816) became vice pres under Harrison (1840) and 10th pres (1841) his veto on tariff bill (1842) caused resignation of most of his cabinet during his gov Tex was annexed to the U.S.

Tyler, Wat (died 1811) leader of Peasants' revolt in Kent following upon poll tax (1811) marched to London with Jack Straw and was killed by the Lord Mayor

Tyler, Sir Edward Burnett (1832-1917) Eng anthropologist travelled in Mexico where rich prehistoric remains aroused his interest in anthropology the limits of which science he was the first to define became keeper of the Oxford Univ museum and reader in anthropology (1884) (*Primitive Culture* (*Gifford Lectures on Natural Religion*)

Tyndale, William (1480-1536) Eng 1st reformer 1509

Tyndall, John (1820-93) Ir physicist was a railway engineer (1844-47) studied at the universities of Wurzburg and Berlin (1848-51) professor of natural philosophy at the Royal Institution (1851) in conjunction with Helmholtz investigated structure and motion of Gases his lecture on *The Influence of Material Aggregation upon the Manifestations of Force* brilliantly original (*Heat considered as a Mode of Motion* (*Sound*)

Tyresneal, Richard Talbot, Earl of (1630-91) commander of the forces in Ir and victor under James II whose cause he assisted by suppressing Protestants did whilst preparing to assist William of Orange

Tyrtamus (7th cent BC) Gk poet was probably born in Attica he was sent as a mock commander of the Iliad's main army and so animated the Spartan soldiers by his martial strains that they completely defeated the Messonians
Tyrtamit, Thomas (1730-1786) Eng man of letters published among other works in edition of Chaucer's (*Canterbury Tales* (1772-78) became trustee to the Brit Museum (1784) to which he left part of his library

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Uberweg, Friedrich (1826-71) Ger philologist professor at Konigsberg (1862) opposed a theory of ideal realism to Kant's subjective theory (*History of Philosophy*)

Uccello, Paolo (1397-1474) It painter real name was Don his quaintly realistic pictures mostly studies in perspective the *Battle of San Ladino* is in the National Gallery London

Udal, Nicholas (1506-56) Eng scholar and playwright headmaster of Eton and afterwards of Westminster (*Relph Boster Doster*, the first English comedy, discovered in 1840)

Uhland, Johann Ludwig (1797-1862) Ger poet took an active part in the rising of Germany against Napoleon member of the Warttemberg Assembly (1819-1830) professor at Tubingen (1830-33) wrote ballads and lyrics in the medieval spirit (*The Luck of Edenhall* ", German folk songs)

Ullrich (311?-83) Gothic Christian apostle appointed bishop of the Gotha north of the Danube (341) his translation of the Bible the most ancient work in a

Teutonic language fragments only extant

Ullswater, James William Lowther, 1st Viscount (born 1855) Brit politician succeeded Viscount Gully as Speaker of the House of Commons (1905) retired and was raised to peerage (1921)

Ulugh Beg (1394-1449) Persian astronomer succeeded his father as Prince of Samarkand (1447) and erected an observatory there corrected serious errors in Arabian star calculations

Urban, Charles (born 1867) Brit inventor pioneer with Robert W Paul and others of cinematography introduced colour photography by means of screens (*The Cinematograph in Science*)

Urban II (died 1099) Pope (1088-89) opposed the Emperor Henry IV who set up an anti pope against him and took Rome convened the Council of Clermont in 1095 at which the first Crusade was proclaimed

Urban III (died 1187) Pope (1185-87) opposed the usurpations of Emperor Barbarossa and refused to yield Papal estate in Tuscany

Urban IV (died 1264) Pope (1261-64) instituted the feast of Corpus Christi and increased the number of cardinals overthrew Hohenstaufen dynasty's greatest enemies of the papacy

Urie, Honoré de (1568-1624) Fr writer author of the famous romance *L'Astree* (1610) served as a soldier in the religious wars

Urquhart, David (1805-77) Brit politician represented Stafford in Parl (1847-52) opposed Lord Palmerston's policy against the Turks introduced the Turkish bath into England

Urquhart, Sir Thomas (1611-80) Scot author and soldier fought against the Covenanters knighted by Charles I (1641) imprisoned during the Commonwealth but released by Cromwell (1652) (*The Jewel* " *Logopandectemon* " translation of Rabelais whom he in some respects almost surpassed)

Usher, James (1811-1636) Ir divine Bishop of Meath in 1620 Archbishop of Armagh (1624) calculated the chronology of the testaments

Utamaro, Kitagawa (1754-1808) Jap designer his colour drawings of landscape scenes and beautiful women earned him the title of great master of the popular school

Vasbell, Horace Annesley (born 1861), Eng novelist was an officer in the Rifle Brigade (1888) but took to literature in 1894 his many successful novels contain memorable characters, notably Quincey which was dramatized (*The Waters of Jordan* (*The Race of Clay* (*The Fourth Dimension*)

Vaillant, Jean Baptiste (1790-1872) marshal of Fr served in the Napoleonic wars made prisoner in 1813 but was present at Waterloo and was sent to Algeria (1830 and 1834) became field marshal after the coup d'état of 1831 served in it made minister of the house of the emperor (1860)

Valdemar see Waldemar
Valdes, Juan de (1500-41) Sp theologian retired to Naples to escape the Inquisition devoted himself to the spiritual reformation of the church (*Hundred and Ten Considerations*)

Valens, Flavius (328-78) Emperor of Rome a Pannonian by birth reigned in the East while his brother ruled in the West fought Persians and Goths supported Arius against Christianity

Valentinian I (321-76) Emperor of Rome born of humble parents declared emperor in 364 and shared his power with his brother Valens carried on wars with the Goths killed in a campaign against the Quadi

Valentinian II (371-92) Rom Emperor, son of the above reigned with Gratian till 383 governed the whole of the West with Theodosius deposed by Maximus but restored by Theodosius and was finally assassinated

Valentinian III (419-55), Rom Emperor,

- proclaimed in 425 during his reign Britain was abandoned and Italy invaded by Attila having caused Aetius to be killed was himself murdered
- Valera, Juan** (1824-1906) Sp statesman and man of letters entered diplomatic service (1847) director of public education (1868) ambassador to Lisbon Washington Brussels Vienna (1881-97) his novel *Pepeita Jimenez* marked renaissance of modern Spanish novel *Dona Inez* (1879) *Juanita La Larga* (1896)
- Valerian** (Publius Licinius Valerianus) (190-266) Rom Emperor was elected when over sixty years old after defeating the Goths he wrested Antioch from the Persians and pursued them to the Euphrates but was captured and imprisoned
- Valetta, Jean Parisot de la** (1498-1568) grand master of the knights of St John repulsed in attack on Malta by the Sultan Soliman in 1565 and founded the town of Valetta
- Valle, Lorenzo** (1400-37) It writer discovered the genuineness of the donation of Constantine carried on controversies with Poggio and many other scholars of great repute (*History of Ferdinand of Aragon* *De Elegantis Latine Linguae*)
- Vallendigham, Clement L.** (1820-71) Amer politician accused of aiding the South and convicted by military court (1863) sentence of imprisonment commuted by Lincoln to banishment to Confederate states afterwards reconciled to republic and initiated new departure democratic movement
- Vambéry, Arminius** (1832-1913) Hun traveller disguised as a dervish went through the deserts of the Oxus to Khiva and Samarkand (1861-64) professor of Oriental Languages at Pesth (*Travels and Adventures in Central Asia* (1864) *Life and Adventure* in 1884)
- Vanbrugh, Irene** (born 1872) Eng actress daughter of Frederic Vanbrugh of Exeter first appeared as the White Queen in *Alice in Wonderland* (1889) pronounced success as Sophie in *Illegitimacy* (1899) subsequently with her husband Dion Boucicault very popular in plays of Sir W. Barry (1911-25)
- Vanbrugh, Sir John** (1664-1726) Eng dramatist and architect served as a captain in F and was imprisoned in the Bastille designed Blenheim Palace and the Haymarket Theatre (*The Relapse* *The Provoked Wife* *The Confederates*)
- Vanbrugh, Violet** (born 1867) Eng actress sister of Irene Vanbrugh first success as Anne Boleyn with Henry Irving (1891) best impersonation was Queen Katherine in Sir Herbert Tree's production of *Henry VIII* (1910)
- Van Buren, Martin** (1782-1862) Amer statesman was Jackson's right hand man and succeeded him as pres (1836) known as the Little Magician for his diplomatic aptitude
- Vancouver, George** (1758-98) Brit sailor with took in his second and third voyages made commander of an expedition (1791) to ascertain means of communication between the North Pacific and the North Atlantic discovered Vancouver Island (*Vancouver's Voyage*)
- Vandamme, Dominique** (1770-1830) Fr general after serving throughout the revolutionary and Napoleonic wars was captured at Kulm (1813) and sent to Siberia when released he rejoined Napoleon helped to defend Paris after Waterloo but was banished at the restoration
- Vanderbilt, Cornelius** (1794-1877) Amer capitalist was successively a New York ferryman captain of a steamer and hotel proprietor made the greater part of his fortune (\$20 000 000) by his steam boats and by railway speculations founder of the Vanderbilt millions, his son William was for a time the world's richest man
- Vandervalde, Emile** (born 1866), Bel Socialist leader after being a prominent member of the International entered the Belgian Chamber (1894) took a leading

- and patriotic part in war politics (1914-18) represented Belgium at Peace Conference (1919) Minister of Justice (1920)
- Van der Weyden, Roger** (1400-64) Flemish painter of the school of Van Eyck his pictures distinguished by intense devotional spirit ("Pain Home" Descent from the Cross)
- Van Diemen, Antony** (1797-1841) Gov of Dutch East India he commissioned the expedition which resulted in discovery of Van Diemen's Land S.E. Australia by A. J. Tassman
- Van Dyck, Sir Anthony** (1599-1641) Flem portrait painter after studying under Rubens visited Italy and England was made royal painter by Charles I whom he is said to have painted 26 times a profitable worker his style profoundly influenced the Eng school
- Van Dyke, Henry** (born 1812) Amer clergyman and diplomat professor of Eng literature at Princeton Univ (1900-13) U.S.A. Minister to Netherlands (1913-17) (*The Blue Flower* *Ishtar* *Man's Luck*)
- Vane, Sir Henry** (1599-1654) Eng politician right hand man of Charles I Sec of State (1640) brought about impeachment of Strafford when decried by Charles I (sponsored the parliamentary cause)
- Vane, Sir Henry** (1613-62) called the Younger Eng Puritan statesman governor of Massachusetts (1636-37) entered Parl and was appointed treasurer of the navy took an active part against Strafford was the principal mover of the Covenant in England and the self Denying Ordinance beheaded after the Restoration
- Van Rensselaer, Stephen** (1764-1839) Amer political leader the first of the patroons (proprietors under the old Dutch grant) lieutenant governor of New York (1795-1801) ardent supporter of the Free and voluntary
- Van't Hoff, Jacobus Henricus** (1852-1911), Dutch chemist extended Kekulé's graphic chemical formulae in three dimensional space in accordance with known facts of organic chemistry founded science of stereochemistry awarded Nobel prize for chemistry (1901)
- Van Tromp** see Tromp
- Vasley, John** (1774-1842) Eng painter one of the founders of the Water Colour Society friend and patron of William Blake (*Treatise on Perspective*)
- Varnhagen von Ense, Karl August** (1780-1858) Ger historian and diplomatist entered Austrian army and served with the Russians during war of liberation he entered the Prussian diplomatic service (1814) (*Life of Goethe* correspondence with his wife Ethel Varnhagen remembered for her literary salon in Berlin)
- Varro, Marcus Terentius** (116-26 B.C.) Latin writer took sides with Pompey but made his peace with Caesar and enjoyed the favour of Augustus he wrote 490 works of which two only *De Re Rustica* and *De Lingua Latina* are extant
- Varnhagen, Ludovico de** (16th cent) Venetian traveller the narrative of his travels in Asia and the East Indies (1510) contains the earliest mention of Australia
- Varus, Publius Quinctilius** (died A.D. 9) Rom general his defeat by the Germans under Arminius led to the despairing exclamation of Augustus *Varus Varus give me back my legions*
- Vasari, Giorgio** (1511-74) It painter architect and writer he was a pupil of Michelangelo left portraits of merit and was skilled as a goldsmith built the enlarged Magistrate of the Uffizi Gallery Florence *Lives of the Most Excellent Painters Sculptors and Architects* (1550)
- Vasee da Gama** see Gama
- Vauban, Sebastien le Prestre de** (1633-1707) Fr soldier served first in the Spanish army but having been made prisoner entered the French service, and became chief engineer conducted over forty sieges and erected about 180 fortresses captured Lille (1667) Mons (1691), and Charleroi (1694)

- Vaughan, Herbert** (1832-1903) Eng Rom Cath prelate succeeded Manning as Cardinal and Archbishop of Westminster erected Westminster Cathedral supported temperance and commercial education movements
- Vadrasna, John Eugene** (born 1867) Eng theatre manager famous with Granville Barker for production at Court Theatre (1904-7) of best ancient and modern plays from Euripides to Bernard Shaw
- Vadrasna, Jules** (1882-1919) famous Irishman who won many flying prizes
- Vaga, Lope Felix de** (1562-1635) Sp lute and dramatist wrote *Hermosura de Angelica* while serving with the Armada entered Franciscan order one of the founders of Sp drama
- Velasquez, Don Diego Rodriguez de Silva y** (1599-1660) Sp painter 1685
- Velasquez, Diego** (1460-1522) Sp sailor sailed with Columbus on his second voyage conquered Cuba (1511) directed expedition which resulted in discovery of Yucatan (1517)
- Vandome, Louis, Duc de** (1634-1712) Fr general descendant of Henry II took Barcelona in 1637 commanded in It against the Imperialists and during the Sp succession war was defeated at Oudenarde but won the battle of Malplaquet (1710)
- Venezios, Eleutherios** (born 1864) Gr statesman led Cretan revolt (1896) opposed appointment of Prince George by international commission (1897) chosen to lead military force at Athens (1909) and after revolution became virtual leader of Greece until 1920
- Veringstom, (died 41)** leader of Gaulish tribe of the Arverni leader of the great rebellion against Caesar 1802
- Verdi, Giuseppe** (1813-1901) It composer 483
- Vere, Aubrey Thomas de** (1814-1902) Ir poet and political writer first published in 1842 *The Waldens of St Patrick* in 1879 *Legends of the Saxon Saints* and in 1888 *The Story of Queen Meide and other Legends of Ireland's Heroic Age* etc
- Vere, Sir Francis** (1560-1600) Eng soldier fought against Sp in the Netherlands and as adjut. general of Elizabeth's forces (1593-1604) took Newport and Bommeil and detoured Ostend (commenced in 1607)
- Verhaeren, Emile** (1859-1916) Belg poet and man of letters founded *Le Commerce* and led the young Belgians later poetry marked by patriotic colour (*Les Flamands* *Villages Illus* *Les Ailes*)
- Verlaine, Paul** (1844-96) Fr lyric poet Verlaine is the Watteau of poetry with tragic verses written in an escape from existence he developed in his troubled life proceeded into a sort of intense feeling and religious emotion *Poemes* *Collected* (1861) *Stances* (1881) *Bonheur* (1891)
- Ver Meer, Jan** (1632-75) Dutch painter studied with the Delft Guild and developed in original genre his pictures *View of Delft* *Drum at her Toilet* and *Mary and Martha* forgotten for two centuries now re-established as masterpieces
- Verne, Jules** (1828-1905) Fr writer one of the first to make conscious use of scientific knowledge in fiction (*Twenty Thousand Leagues under the Sea* *Around the World in Eighty Days*)
- Vernet, Emile Jean Horace** (1794-1863) Fr painter received instruction from his father Cécile, attached to the Bonaparte regime fighting for it at Eylau in 1807 and illustrating its achievements director of the school of art at Rome (1828) (*Napoleon on the Eve of Waterloo* *The Bridge of Arcole* *The Smothering of Abd el Kader Surprised*)
- Vernon, Edward** (1684-1757) Eng admiral took Porto Bello in 1739 but failed in the attempt on Cartagena in the following year introduced rum ration called after his nickname *Grog*
- Veronese, Paul** (Cagliari) (1624-88) It painter studied with Titian at Venice

became the most popular decorative painter and muralist of his day (Murazzi at Cassin) in the Louvre. Adoration of the Madonna and Family of Darius at the foot of Alexander in the National Gallery.

Verrocchio, Andrea del (1432-48) It. sculptor and painter. was the master of Leonardo da Vinci and Lorenzo di Credi and one of the greatest early Renaissance artists. Equestrian statue of Colonna Venice bronze David (Florence) and the Baptism (painting).

Vertes, George (1864-1936) Eng. engraver and antiquary. executed prints for Ripon's History and of portraits of Charles I. twelve Eng. poets etc. collected materials for a history of art in Eng. which were utilized by Horie W. J. J.

Vesalius, Andreas (1514-64) Belgian anatomist. examined Charles V in his campaigns as physician and also treated Philip II. prepared way for scientific comparative anatomy (De Corp. Hum. Lib. 1).

Vespasianus, Titus Flavius (c. 39) Emperor of Rome. saved with distinction in Germany Britain and Syria. was proclaimed Emperor in 69. annexed North Wales and Angles and then declared British.

Vespa, Hermann (1829-1910) Amer. actor. came to Eng. played Jacques. Paul. Bruce and Dr. Pinotow with great success.

Victor, Claude, Duc de Bellune (1764-1841) Fr. soldier. at first a drummer boy. he became general of division (1799). distinguished himself at Marengo and received his baton after. found himself in success in Sp. but lost battles of Albuera (1809) and Barrosa (1811). deserted Napoleon in 1814. was a minister (1821-3).

Victor Amadeus II (1666-1712) Duke of Savoy. turned the persecution of the Waldenses. recognized as hero to the crown of Spain at the Peace of Utrecht. given Sicily but received Sardinia in exchange (1720). abdicated in 1730 but soon after attempted to resume the crown and was arrested by his son Charles Emmanuel.

Victor Emmanuel II (1814-78) King of Italy. became King of Sardinia on the abdication of Charles in 1834 and reorganized the kingdom. sent contingent to help the allies in the Crimea. he secured the alliance of France in his struggle with Austria (1859). the result was the union of Italy and the ruler of Sardinia.

Victor Emmanuel III (born 1869) King of Italy. succeeded throne on ascension of his father Umberto I (1900). commanded Italian armies with great skill during World War. also famous for his knowledge of numismatics.

Victoria (1817-1901) Queen of Great Britain and Empress of India 1821-58.

Vignola, Giacomo Barozzo Da (1507-74) It. architect. studied painting without success then took up science of perspective. succeeded Michelangelo as architect to St. Peter's, Rome.

Vigny, Alfred, Comte de (1797-1863) Fr. writer. his romanticism profoundly influenced Victor Hugo. Poemes Antiques et Modernes (1826-27). L'Inconnu (1826).

Vilhjalm, Pausgale (1827-1917) It. historian. professor of history at Pisa (1859) and Florence (1862). helped to expel Bourbons from Naples (1860). his chief works are Savonarola and his times (1863). Machiavelli and his times (1877-82).

Villars, Louis, Duc de (1613-1734) Marshal of Fr. served in his youth under Condé and Turenne. twice ambassador at Vienna. suppressed the Cornard rising (1705). defeated by Marlborough at Ramillies and Millaquet in wars of succession. took Denain (1712).

Villemann, Abel François (1740-1870) Fr. writer. assisted Guizot at the Sorbonne. professor of eloquence and minister of public instruction from 1839 to 1844 (Cours de la Littérature Française (1828-30), "Souvenirs d'Histoire et de Littérature").

Villeneuve, Pierre Salvastore (1763-1806),

Fr. admiral. commanded the right wing at Aboukir. planned the invasion of Eng (1804). defeated by Sir R. Calder off Perot. against his will fought the battle of Trafalgar.

Villiers, Charles Pelham (1802-88) Brit. politician. elected for Wolverhampton (1812). took a leading part in the Anti-Corn Law agitation. Judge Advocate General (1813). Pres. of the Poor Law Board (1839-66).

Villiers, Frederic (1852-1922) Brit. war artist. correspondent to Graphic and Illustrated London News in many campaigns from Russo-Turkish war (1877-78) to World War (1914-18). Villiers has five decades of Adventure (1921).

Villiers de l'Isle Adam, Philippe (1839-99) Fr. poet and dramatist. claimed descent from a grand master of Knights of Malta and aspired to throne of Greece. wrote Azel a drama which started the Symbolist movement in Fr. literature (Les Reves et l'Art Futur).

Villon, François (1431-85) Fr. poet. greatest of Fr. ballade singers in the Middle Ages. living among vagabonds and thieves he twice narrowly escaped hanging and ended his days in a monastery (Le Grand Testament (1481). many ballades and rondeaux).

Vincent, Sir Charles Howard (1849-1908) Brit. politician. director of Criminal Investigations from 1878 to 1904. entered Parl. (1883). largely responsible for First Offenders Act (1887) the Aliens Immigration Act (1901) and the institution of the Public Trustee (1908).

Vincent de Paul, Saint (1576-1660) Fr. priest. captured and made a slave by Turkish pirates. almoner to Margaret of Valois and tutor to Cardinal de Richelieu. founded the *confrérie de charité* (1617). reformed galleys and instituted the *Sœurs de charité* (1634).

Vino, Leonardo da (1432-1510) It. painter and sculptor. as artist worked chiefly in Milan and Florence. painting in former city his Last Supper and in latter his Little of the standard constructed in aqueduct to Milan and wrote many treatises on painting. natural history and science.

Viollet-le-Duc, Eugene (1814-79) Fr. architect and writer. restored Notre Dame. La Sainte Chapelle and other churches. commanded a body of engineers at the siege of Paris. prophet of Gothic revival (Military Architecture in the Middle Ages. Restoration).

Viotti, Giovanni (1733-1824) Italian violinist. successful at Paris and in Eng. but was compelled to leave the latter country on suspicion of being a spy. returned (1794) and became director of the Paris opera (1819). composed concertos in A. B. C. and D.

Virehow, Rudolf (1821-1902) Ger. pathologist. obtained chairs of pathological anatomy at Wurzburg and Berlin (1856). involved in politics and challenged to a duel by Bismarck (1863). established the doctrine of cell from a cell (Cellular Pathology (1858)).

Virgil (Publius Virgilius Maro) (70-19 B.C.) Rom. poet. found patrons in Maecenas and Augustus, who restored to him his estate stolen from his father after battle of Philippi. his works universally regarded as the crowning glory of Rom. poetry. *Scout Beuve* said he divined at a decisive hour what the future would be (The *Georgics* or *Bucolics*).

Visconti-Venosta, Emilio (1829-1914) It. statesman. follower of Mazzini until 1853 when he joined Cavour. royal commissioner Garibaldi's army (1859). times Foreign Minister.

Vitellius, Aulus (15-69) Rom. Emperor. raised to the purple by the Ger. legions in Jan. 69. his forces were defeated by the army of Vespasian and Vitellius was later killed at Rome.

Viviani, René (born 1863), 21 Socialist statesman. born Algeria. entered chamber (1893), Prime Minister (1914) when he organized govt. on war basis. represented Fr. in League of Nations and delegate to Armament Conference, Washington (1921-22).

Vizetelly, Ernest Alfred (1835-1922), Eng.

journalist and author. served with Fr. army during Franco-Prussian war (1870) and was incarcerated in Paris. Paris and Her People (1919). My Adventures in the Commune (1914).

Voeleker, John Christopher Augustus (1822-84) Eng. agricultural chemist. born Frankfurt on Main. professor of chemistry Royal Agricultural College, Cirencester (1849). his theories widely applied to practical farming.

Vogel, Sir Julius (1833-99) New Zealand statesman. founded *Otago Daily Times*, held office under Fox and Waterhouse. was Prime Minister (1866). Agent General in London (1876). again held office in New Zealand (1884-97).

Vogler, Georg Joseph (1749-1814) Ger. musician. court Kapellmeister at Stockholm (1786-98) and at Darmstadt (1807) where Weber and Meyerbeer were among his pupils.

Volney, Constantine, Comte de (1757-1820) Fr. traveller. member of the States-General. imprisoned during the Terror but emboldened by Napoleon and the Bourbons (Voyage en Syrie et en Egypte and Ruins or Meditations on the Revolutions of Empire).

Volta, Alessandro, Count (1745-1827) It. physicist. for thirty years professor at Pavia. invented the voltaic pile or electrical column.

Voltaire (François Marie Aronst) (1694-1778) Fr. author. 1003.

Voronoff, Serge, Austrian surgeon. discovered and experimented with glandular treatment for strutting semites.

Voss, Johann Heinrich (1711-1826) Ger. poet. professor at Heidelberg. translated parts of Homer. Virgil. Ovid. Theocritus and the whole of Shakespeare. Luise (1793).

W

Waagen, Gustav Friedrich (1794-1868) Ger. writer. professor of art history at Berlin. his chief work was *Kunstwerke und Künstler in England und Paris* of which there are several Eng. versions.

Wace (died circa 1184) Anglo-Norman poet. made canon of Bayeux by Henry II. was author of the two rhyming chronicles *Roman de Rou* and *Le Roman Anglaise*.

Wace, Henry (1836-1924) Eng. theologian. Fellow of St. Paul's (1881). principal of King's College London (1882). Dean of Canterbury from 1903 to death. edited with Dr. W. Smith the Dictionary of Christian Biography.

Waddington, William Henry (1826-94) Fr. statesman of English parentage. Minister of Public Instruction (1875). Minister of Foreign Affairs (1877). ambassador in England (1884).

Wade, George (1873-1748) Brit. soldier. won distinction at Alma (1857) and Balaclava (1854). held command in Highlands after Jacobite rebellion. recognized building of military roads, held marshal (1743).

Wade, Sir Thomas Francis (1818-93) Brit. diplomat. became Brit. minister in China in 1871, having previously been attached to the Legation Mission (1857-60) in which his knowledge of Chinese was of great service. he published in 1867 *A Progressive Chinese Course*.

Wade, Thomas Russell, Indian missionary, 727.

Wadham, Nicholas (1536-1609) founded the college at Oxford which bears his name, and which was finished in 1613.

Wagenaar, Jan (1709-73), Dutch writer. historiographer of Amsterdam. wrote *A History of Holland* (in 21 vols.) and many other works.

Waghorn, Thomas (1800-60), Brit. naval officer. projected the overland route to India, he ruined himself in the undertaking, but received a pension shortly before his death.

Wagner, Wilhelm Richard (1813-83), Ger. composer, 147.

Wahhab, Mohammed Ibn Abdul (1703-91) Mohammedan reformer, founder of the Wahhabis, his father being a sheikh, condemned the worship of the Prophet,

the use of tobacco and wine and other usages against which with the help of his son in law Sheikh Ibn Saud he took forcible measures. His doctrines spread widely especially among the Bedouins.

Wain, Louis William (born 1860) Eng artist and illustrator famous for his life like and humorous drawings of cats.

Wainwright, Thomas Griffiths (1794-1842) Eng art critic suspected of poisoning several relatives whose lives he had heavily insured transported for life for forgery.

Wais, Georg (1813-96) Ger historian professor at Göttingen (1848-75) edited for some time the *Monumenta Germaniae Historica*. History of the German Constitution. History of Schleswig Holstein (1851-54).

Wake, William (1667-1737) Eng divine successively Dean of Exeter Bishop of Lincoln and Archbishop of Canterbury (1716) attempted to bring about a union of the English and Gallican churches.

Wakefield, Edward Gibbon (1796-1862) Brit colonial statesman while in prison for abduction wrote his *Letter from Sydney* (1820) advocating Wakefield system of colonization afterwards adopted. Obtained annexation by Great Britain of New Zealand (1840).

Wakefield, Gilbert (1756-1801) Eng scholar and critic succeeded from the Church of England (inquiry into the Opinions of the Christian Writers of the Three First Centuries Concerning the Person of Jesus Christ).

Wakefield, Henry Russell (born 1844) Eng prelate Bishop of Birmingham (1911) prominent on London School Board (1897-1900) and as chairman of unemployment and poor law committees.

Wakefield, Finsella (died 1832) established at Fotheringham the Fugitive Bank (the first savings bank).

Wakley, Thomas (1795-1862) Eng physician established the *Lancet* in 1823 exposed medical abuses and food adulteration.

Waldeck, Christian August, Prince of (1744-78) served with credit in the Austrian army against the Fr and became member of the Aulic Council he died in Port whether he had gone to reconquer the army.

Waldeck, George Frederick, Prince of (1820-92) distinguished himself as field marshal in the imperial service against the Fr and against the Turks at the siege of Vienna (1868) after wards as marshal general in the Dutch service he commanded against the armies of Louis XIV.

Waldeck-Rousseau, Pierre Marie René Ernest (1840-1904) Fr statesman as a barrister defended de Lesseps in Panama trial (1893) and received Dreyfus c. (1899) Premiership (1899) marked by measures against power of Church.

Waldemar (1242-1302) King of Sweden was elected in 1250 but defeated by his brother Magnus I in 1279 and died in prison.

Waldemar I (1131-82) King of Denmark put down the pirates of the Wends refused to do homage to the Emperor Frederick Barbarossa but assisted him against Henry the Lion.

Waldemar II (1170-1241) King of Denmark made Norway tributary received title of King of the Wends from Frederick II for his assistance against Otto.

Walden, Thomas (died 1430) principal of the Carmelites in Eng and confessor of Henry V wrote *Doctrinale Antiquum Fidei* Ecclesiae Catholicae against the Lollards and was probably author of *Tractatus de Sacramentis Johannis Wyclif*.

Waldes, Frances of. See Edward.

Waldowski, Alexandre Colonna, Comte (1810-68), Fr statesman natural son of Napoleon I was much employed diplomatically by Napoleon III Foreign Minister from 1855 to 1862 and pres of the Corps Legislatif in 1865.

Walford, Edward (1823-97) Eng writer among his best known works are *London domine*, "The County Families of the

United Kingdom part of 'Old and New London', Greater London, he also wrote several biographical and educational books.

Walford, Lucy Bethun, Eng novelist published in *Blackwood's Magazine* The Baby's Grandmother A Stuffed Generation and other works and also wrote Mr Smith etc. She married in 1869 A S Walford.

Wald I (died 711) Omurid Caliph of Damascus came to the throne in 701 and acquired Armenia (Armenia in Cappadocia) from the Greek Empire the great mosque of Damascus was begun in his reign.

Wald II ("Al Fasih") (703-41) succeeded Ibrahim in 741 but was soon after put to death.

Walker, Clement (died 1651) Eng political writer author of History of Indemnities was imprisoned by Cromwell and wrote a violent tract against him when in the Tower of London.

Walker, Frederick (1840-75) Eng painter engraved illustrations to Thackeray's novels chief pictures 'Vagrants' (1864) now in the National Gallery. The Mothers (1867).

Walker, George (1618-90) Fr clergyman in old age defended Londoners for 10 days killed at the battle of the Isne.

Walker, John (1732-1807) Eng lexicographer chief work A Critical Pronouncing Dictionary was published in 1775.

Walker, Robert (died circa 1611) Eng painter executed several portraits of (some) (one in the National Portrait Gallery) as well as of Blake and other contemporaries.

Walker, Thomas (1784-1836) Eng humorist was in active police magistracy but is chiefly remembered by his weekly publication *The Original* (1833).

Walker, William Sydney (1745-1816) Brit poet and scholar educated at Eton and Trinity College edited Corpus Poeticum Latinum left behind Poetical Remains copious notes on the text and versification of Shakespeare which were embodied in book published in 1834 and 1860.

Walker-Arnett, George (1796-1866) Brit botanist held the chair of Botany at Glasgow from 1845 till his death travelled extensively and collaborated with Hooker in his British Flora and other works.

Walkley, Arthur Bingham (born 1855) Eng dramatic critic assistant sec of post office (1911-19) his brilliant and discerning criticism for long a feature of *The Times*. Drama and Life (1910) Pastiche and Prejudice (1921).

Wall, William (died 1281) Eng divine rec of Shoreham Kent author of History of Infant Baptism.

Wallace, Alfred Russel (1823-1913) Eng scientific writer 488.

Wallace, Lewis (Law) (1818-1903) Amer civil war general and author fell up Confederate forces and saved Washington from capture wrote Ben Hur and The Prince of India.

Wallace, Sir William (1790-1830) Scot soldier and national hero he died rising against English (1297) won victory at Cambruskenneth crossed the border and was named guardian of Scotland defeated by Edward I at Liddell (1298) carried on a guerrilla warfare for seven years declared an outlaw in 1304 was captured and hanged (1305).

Wallace, William Vincent (1814-60) Fr composer born at Waterford travelled extensively and lived for some time in Mexico and New York among his operas are *Mariana* (1845) *Lurline* (1860) and *The Amber Witch* (1861) he also wrote many songs.

Wallack, James William (1794-1864) Eng actor became stage manager at Drury Lane in 1824 he afterwards played much, both in Eng and Amer and in 1861 established Wallack's theatre at New York.

Wallack, Lester (1820-68), Eng actor son of preceding held for two years a commission in the Brit army but afterwards adopted his father's profession

and played with success at New York in many comedies.

Wallenstein, Albrecht Wenzel von (1643-1634) Ger general defeated Mansfeld and the Danes deprived of his command (1630) by the jealousy of the League but recalled to oppose Gustavus Adolphus was defeated at Lutzen where Gustavus fell negotiated with France and having been outwitted by the emperor was assassinated at Eger.

Waller, Edmund (1600-87) Eng poet and politician sat in the Long Parl in prison in 1643 for complicity in Rye House plot, famous for lyric 'Go Lovely Rose' and revival of heroic couplet.

Waller, Lewis (1860-1911) Eng actor associated with Sir Herbert Tree in Shakespearean revivals most popular impersonator of romantic heroes of his day chief successes in *The Three Musketeers* *Monsieur Deauville* and *Robt. Hood*.

Waller, Sir William (1607-1668) Eng soldier member of the Long Parl became second in command of the outbreak of war with the king he gained some success in the west but was removed to the self Denying Ordinance in 1646 and twice imprisoned.

Walls, Henry, English painter his best known work is 'The Death of Chatterton in the Gate Gallery wrote much on ceramics.

Walls, Robert (1794-1870) Eng line engraver executed plates for Turner's pictures his engraving of Lake Nemi is of special value.

Wallon, Henri Alexandre (born 1812) Fr historian and politician had a considerable share in the establishment of the third republic and in 1875 became minister of public instruction among his literary works are *Histoire d'Art* Richard II and Le Tribunal Revolutionnaire de Paris (1861).

Walpole, Horace (1717-37) Eng writer youngest son of Sir Robert Walpole 1st Earl of Orford friend and fellow traveller of Gray Inspector of Imports and Exports (1837-38) entered Parl (1741) retired from public life (1768) and devoted himself to the fine arts (Memoirs. The Castle of Otranto a novel. Historic Doubts on the Life and Reign of Richard III and Cor respondent (1735-9)).

Walpole, Hugh Seymour (born 1884) Eng novelist wrote *Fortitude* *The Dark Forest* *The Old Ladies*.

Walpole, Sir Robert (1676-1743) Brit statesman entered Parl as a Whig in 1701. Sec of War (1709) expelled by the Tories on the fall of Marlborough on a charge of corruption again fell office from the accession of George I till 1717 from 1720-42 was the most influential minister developing material prosperity of England but governing without the help of Orford (1741).

Walpole, Sir Spencer (b. 1807) Eng historian, diplomat, governor of the Isle of Man (1861) wrote *History of England from 1815* *History of Twenty Five Years* *Life of Lord John Russell*.

Walpole, Spencer Horatio (1806-98) Brit statesman was Home Sec under Lord Derby in 1852 and in 1858 held the same office was also in 1864-67 he represented Cambridge Univ from 1856 to 1862.

Walsh, Stephen (born 1839) Brit politician after eighteen years as a coal miner entered Parl in 1906 became for War in first Labour Government (1924).

Walsh, William John (1841-1921) Ir Cath divine pres of Maynooth College (1880) Archbishop of Dublin (1885) acted with Nationalist party but declared against Parnell on the decision of the Divorce Court.

Walsh, Walter Hayle (1912-92) Ir physician, was for several years professor of medicine in Univ College London resigning in 1962 published *Practical Treatise on the Lungs* and several other notable works.

Walsingham, Sir Francis (1530-90), Eng statesman, Sec of State (1573), one

of the commissioners for the trial of Mary Stuart.

Walsingham, Thomas (15th cent.) Benedictine monk, author of a History of England from 1273 to the Death of Henry 5, and many other works.

Walter, John (1739-1812) Eng. printer, acquired printing patent and bought Printing House Square, started the *Daily Universal Register* (1782) which became *The Times* (1788).

Walter, John (1778-1847) Eng. newspaper proprietor, succeeded his father in the proprietorship of *The Times* in 1801, and was a member of Parli. for several years; it was under his management that steam power was first applied to printing in 1814.

Walter, John (1818-94) Eng. newspaper proprietor, son of the above, whom he succeeded in the chief proprietorship of *The Times*, represented Walsingham in Parli. for several years (1841-1843) and Berkshire from 1849 to 1866, and from 1868 to 1884.

Walther, Bernard (died 1304) Ger. astronomer, supposed discoverer of the regular effect of atmospheric refraction.

Walther von der Vogelweide (1160-1200) Ger. poet, patronized by Frederick II (who crusaded in 1228 in company), travelled widely as a minstrel, took part in the poet's contest at Wartburg (1206) and wrote some of the greatest love songs and national airs in the Ger. language.

Walton, Brian (1800-51) Eng. divine, proprietor and editor of the *Polytechnic Journal* (1834-37) was deprived of his preferment at Paul's for being a Unitarian but in the Restoration became chaplain to the king, and Bishop of Chester.

Walton, Isaac (1593-1683) Eng. poet and man of letters, his *The Compleat Angler* (1653) unique as an essay in the d. habits of the contemplative life.

Wanamaker, John (1838-1923) Amer. business man, started a career as a book seller's errand boy, developed retail clothing, business and was a pioneer in advertising methods.

Wanklyn, James Alfred (born 1833) chemist, was professor of chemistry at the London Institution (1863-70) and lecturer at St. George's Hospital (1870-80), with some others he invented the automatic process of water analysis, and with W. J. C. carried the most complete process (1874) and analysis, in this case for iron and copper.

Wappesa, Gustave Baron (1803-74) Belg. painter, founded a new national school, examples of which were *The Division of the Burgomasters of Leyden*, *The Partition of Charles I with his children*, and *The Defense of the Island of Rhodes*.

Warbeck, Perkin (1471-99) Pretended to be the English throne, landed in Ireland (1492), calling himself Richard Duke of York, five years after with the support of the Duchess of Burgundy of France and of Scotland invaded Corn. wall, he confessed was sent to the Tower and executed.

Warburton, Eliot (1810-52) Eng. writer, author of *The Legend and the Cross* (in account of his travels in the East), *Monks of Prime Rupert*, etc. perished in the *torpedo* which was built in the Bay of Biscay.

Warburton, William (1698-1779) Eng. divine, was successively chaplain to the king, Dean of Bristol and Bishop of Gloucester, noted for his advancement of bold theological paradoxes (*The Divine Legation of Moses*).

Ward, Sir Adolphus William (1837-1924) Eng. writer, professor of history and literature at Owens College (1866), part editor of *The Cambridge Modern History* and authority on Ger. history, *Standard History of English Dramatic Literature to the Death of Queen Anne* (1875).

Ward, Artemus, nom de plume of Charles Frazier Browne (1834-87) Amer. humorist, author of many popular humorous books and lectures.

Ward, Edward Matthew (1816-79) Eng. historical painter, pupil of Wilkie, several of his pictures, including *The*

Disgrace of Lord Clarendon, *The South Sea Bubble*, etc. are in the National Gallery, London; he died by his own hand.

Ward, Dame Genevieve (1837-1922) Eng. actress, born New York, after a brilliant operatic career she lost her singing voice through an attack of diphtheria, made instantaneous success in *Lady Macbeth of Manticore* (1873) but best part was *Stephanie in Forget me not* (1870).

Ward, H. Marshall (born 1874) physiologist, botanist, was sent to report on the cause of the coffee leaf disease in 1879 and in 1889, became professor of botany at Cooper's Hill, his chief works are *The Diseases of Plants* and *Flower and Some of its Diseases*.

Ward, Humphry (1811-1920) Eng. novelist, see *Ward Mary Augusta*.

Ward, James, R.A. (1789-1849) Eng. artist, his animal pictures remarkable for their striking realism (*The Bull But*, *The Bull and Landscape* with cattle in the National Gallery, London).

Ward, John (born 1866) Brit. Labour leader, worked as a navvy and founded the Navvies' Union (1890), Labour M.P. for Stoke on Trent (1906), raised five Labour battalions during World War and was on board the *Pyndareus* when it was mined. With the *De Harde*, in Siberia (1920).

Ward, John Quincy Adams (1830-1910) Amer. sculptor, colored statues of Washington and Garfield and the *Philum* at New York.

Ward, Sir Leslie (1851-1922) Eng. artist, popularly known as Sir, his remarkable caricatures a prominent feature of *Punch* (1873-1909).

Ward, Mary Augusta (1851-1920) Eng. novelist, niece of Matthew Arnold, author of *Robert Elsmere* (1888), a problem novel which Gladstone viewed after which it became the talk of the civilized world, other novels written with power and insight include *Wardell* (1894), *The Marriage of William Ash* (1900), founded child welfare work in London, 1906.

Ward, Robert Plumer (1761-1846) Brit. politician, in 1801 held several subordinate offices between 1801 and 1810, wrote *Jeremy* and other novels, and *History of the Law of Nations*, his son Sir Henry Ward (died 1860) held the office of governor of the Ionian Islands (1849) of Ceylon (1856) and of Madras (1860).

Ward, William George (1811-82) Lat. theologian, while fellow of Balliol took part in the Tractarian movement and in 1844 published *The Field of a Christian Church* considered in comparison with its Eastern Practice, which was condemned by Convocation, shortly afterwards he joined the Roman Church.

Warham, William (1450-1521) Eng. divine, Master of the Rolls and Lord Chancellor under Henry VII, Bishop of London (1503) and Primate (1504), resigned the Great Seal (1510), took part in divorce proceedings against Catherine of Aragon.

Warnford, Reginald Alexander John, V.C. (1892-1915) Brit. aviator, brought down a Zeppelin near Brussels, 7th June 1915, and was killed ten days later through his machine crashing.

Warner, Charles (1846-1909) stage name of Charles John Luskford, Eng. actor, created part of Charles Middleton in *Our Boys* and Tom Robinson in *It's Never too Late to Mend*, great exponent of melodrama.

Warner, Charles Dudley (1829-1900) Amer. novelist and humorist, author of *My Summer in a Garden* (1870), *The Gilded Age* (with Mark Twain), *Studies in the South and West*, etc.

Warner, John (died 1666) Eng. divine, successively Dean of Lichfield and Bishop of Rochester, founded Bromley College and also some scholarships at Balliol College, Oxford.

Warner, William (born circa 1558) Eng. poet, author of *Albion's England*.

Warre, Edmund (1847-1920) Eng. school

master, was appointed headmaster of Fton College in 1884, having been assistant master since 1860, and retired in 1905, elected provost (1909).

Warren, Sir Charles (born 1840) Brit. soldier, organized volunteer force in the 7th War of 1880, was severely criticized for his operations at Spion Kop in South African War (1899-1902), wrote *Underground Jerusalem*.

Warren, Sir Peter (1703-32) admiral, took Louisbourg in 1745, and defeated a Fr. attempt to recover it, was buried in Westminster Abbey.

Warren, Samuel (1807-77) Eng. novelist and lawyer, his chief works are *Diary of a Jute Physician*, *Ten Thousand a Year* (1841) and *The Moral and Intellectual Development of the Age* (1843), appointed a Master in Lunacy (1859).

Warren, Thomas (1728-90) Eng. poet and critic, was professor of poetry at Oxford (1757-87) and poet laureate in 1784, besides some criticism, he also published in edition of Theocritus and a *History of English Poetry* (1774-91), his brother Joseph (died 1800) succeeded to the chair of poetry and was headmaster of Winchester for many years.

Warwick, Edward Plantagenet, Earl of (died 1499) son of George Duke of Clarence, was imprisoned and beheaded by Henry VII, is the hero of the *Yorkist* films.

Warwick, Richard Neville, Earl of, "the King-maker" (1428-71) created Earl (1449), joined the Yorkists, getting Edward IV crowned by his influence and defeating his enemies at Towton (1461), quarrelled with Edward and restored Henry VI (1470), defeated and slain at Barnet (1471).

Washington, Booker T. (Tahalefer) (1856-1915) Negro educator, originally a plantation slave, principal of Tuskegee Institute, Alabama, wrote *Up from Slavery*, *Working with the Hands*.

Washington, George (1732-93) Amer. soldier and statesman, 1781.

Waterhouse, Alfred (1880-1905) Eng. architect, designed Giron College, Cambridge and the Manchester Assize Courts.

Waterhouse, John William (1849-1917) Eng. artist, his last picture, *The Martyrdom of St. Paul*, and *The Magna Carta*, purchased out of Chantry Bequest and exhibited at the Tate Gallery.

Waterland, Daniel (1683-1740) divine, held a controversy with Clark on the Trinity, and with Tindal the Deist, and also wrote *History of the Arianism in Creed*.

Waterson, Charles (1782-1866) Brit. naturalist and traveller, made observations in natural history in the Americas, books characterized by humor and accurate observation (*Wanderings in South America*, *Essays in Natural History*).

Watson, Charles (1714-57) Brit. admiral, cooperated with Clive in India (1744-57), especially in the attack on Chindwara gori.

Watson, John Christian (born 1867) Australian statesman, first Labour Prime Minister of Australian Commonwealth (1904).

Watson, John Forbes (1827-92) Brit. physician, reporter on the products of India and director of the India Museum (1858-79), had charge of the Indian departments in the London Exhibition of 1862 that of Paris in 1867, and of Vienna in 1873, his representations led to the founding of the Imperial Institute, London.

Watson, Musgrave Lowthwaite (1804-47) Brit. sculptor, chief works are the statue of Queen Elizabeth in the Royal Exchange, and those of Lord Ligon and Stowell in the library of Univ. College, Oxford.

Watson, Richard (1797-1816), Eng. divine, in early life prof. of chemistry at Cambridge, his researches led to the black bulb thermometer, author of *Apology for the Bible* (against Tom Paine) and *Chemical Essays*, also of *An Address to the People of Great Britain* (1798).

- in support of the Fr war, became Bishop of Llandaff in 1782.
- Watson, Thomas** (died 1686), Eng Non-conformist divine, was imprisoned for his share in a plot to restore Charles II, his chief work was his "Body of Divinity."
- Watson, Sir William** (1715-87), Eng scientist, received the Copley medal in 1745 for discoveries in electricity, did much to introduce Linnæan system of botanical nomenclature into Eng.
- Watson, Sir William** (born 1858), Eng poet, first attracted attention by his "Wordsworth's Grave" (1890) he made poetry the medium for philosophical or contemplative expression wrote "The Mine in Exile," "The Superhuman Antagonists," "Pencraft."
- Watt, James** (1736-1819), Eng engineer, 241
- Watteau, Antoine** (1684-1721), Fr painter under the patronage of Marquis de Turgot painted *Embarcation for Cythera* and many exquisite pastorals and groups illustrating the gay artificial life of 18th cent society.
- Watts, Alaric** (1797-1864), Eng poet and journalist, one of the first to advocate measures for protecting factory workers against accidents from machinery editor (1824) and proprietor (1826) of the *Literary Scotsman*, poems collected in "The Laurel and the Lyre" (1867).
- Watts, George Frederik** (1817-1904), Eng painter 1221.
- Watts, Isaac** (1674-1749), Eng Non-conformist divine wrote many famous hymns and songs "O God our help in ages past," "How doth the Little Bree Bee," etc held unorthodox views on question of Sunday recreation and labour.
- Watts, Sir Philip** (born 1850), Eng naval architect, designer of the *Deedsnought* and modern battle cruisers.
- Watts-Dunton, Theodore** (1832-1914), Eng man of letters, the intimate friend of J. G. Rossetti, George Borrow and Algernon Charles Swinburne apart from criticism he published a volume of poems "The Coming of Love" and a novel *Alvan* both dealing with Roman life.
- Wauters, Emile** (born 1846), Belg artist, his paintings which comprise historical subjects and many notable portraits include the panorama "Santo and the Banks of the Nile," "Mary of Bruggundy and the Sheriff of Ghent" and "Madness of Hugo van der Goes."
- Way, Albert** (1805-74), Eng antiquary founder of the Archaeological Institute whose *Journal* he edited for many years.
- Way, Sir Samuel James** (1836-1916), Australian statesman, was appointed Attorney-General of South Australia in 1875, Lord Chief Justice in 1878 and in 1891 Lieutenant-Governor he directed the government of the colony in 1877-79, in 1883 and 1889, made a hart 1899.
- Wayne, Anthony** (1743-96), Amer soldier, popularly known as "Mad Anthony," for his daring feats at battles of Brandywine and Valley Forge and Stony Point during War of Independence, commander-in-chief (1792), directing campaign against Indians.
- Waynflete, William** (1345-1486), Eng prelate headmaster of Winchester and provost, and often reckoned the first headmaster of Eton, became Bishop of Winchester in 1447 for four years (1466-69) Lord Chancellor, was the founder of Magdalen College, Oxford.
- Webb, Sir Aston** (born 1846), Eng architect, designed Victoria and Albert Museum, Admiralty Arch, the Royal College of Science and Technology, and the new front of Buckingham Palace; elected R.A. (1901) Pres Royal Academy (1919).
- Webb, Sidney** (1859-1918), Brit politician and sociologist, one of the original founders of the Fabian Society, founded the London School of Economics and the *New Statesman* weekly periodical entered Parl (1922) and was Pres. of Board of Trade in first Labour Government (1924) ("Socialism in England," "Towards Social Democracy" with Mrs. Sidney Webb "The History of Trade Unionism").
- Webbe, Samuel** (1740-1816), Eng musical composer, originally a cabinet-maker, composed many glees, canons, catches, and part-songs ("Glorious Apollo" "Come Live with Me").
- Weber, Karl Maria von** (1786-1826), Ger composer theatrical director at Prague (1813) conductor of German opera at Dresden (1817) superintended the production of *Oberon* at Covent Garden shortly before his death, his operas include *Der Freischütz* (1821), *Euryanthe* (1823).
- Webster, Augusta** (1837-94), Eng poet, her early works appeared over the signature "Cecil Home," chief poems "A Woman Sold" (1867), "The Auspicious Day," "In a Day," was a member of the London School Board for several years.
- Webster, Benjamin Nottingham** (1797-1882), Eng actor, manager and dramatist, lessee of the Haymarket in 1837, and later held management of the Adelphi and other houses, produced some of the best contemporary plays interpreted by Websters and the best players of the day, of his own part-plays *Triplet in Market and Fines* and *John Peckymble in The Cricket on the Heath* were among the most successful.
- Webster, Daniel** (1782-1852), Amer statesman, entered Congress (1812) made notable orations on the bicentenary celebration of the founding of the Pilgrim Fathers and on other anniversaries, Sec. of State under Harrison (1840-43) and again from 1850 till his death.
- Webster, John** (1580-1625), Eng dramatist, chief plays *The White Devil*, *The Duchess of Malfi* (1616) and *Appian and Virginia*.
- Wehrer, Noah** (1758-1843), Amer lexicographer, his "Grammatical Institute of the English Language" (1783-85) was so popular that he supported his family on the income from it for 20 years, his famous Dictionary of the English Language was published in 1828 and has frequently been revised.
- Webster, Thomas** (1800-86), Eng artist, best known by his mild, humorous pictures of child life and familiar homely incidents, his "Dinner School" and "The Truant" are in the National Gallery, London.
- Wedekind, Frank** (1864-1918), Ger dramatist, deeply influenced by Ibsen and Strindberg, he wrote daring problem plays which aroused controversy, imprisoned for lese-majesty (*Spring's Awakening*).
- Wedgwood, Josiah Clement** (born 1872), Brit politician, after a distinguished naval career entered Parl (1906) studied land problem and recommended taxation of land values, won D.S.O. during World War, joined the labour party (1919).
- Wedgwood, Josiah** (1730-1793), Eng potter, set up at Burslem (1759), founded pottery works (1766) originator of "Wedgwood Ware" and "Queen's Ware."
- Wedmore, Sir Frederik** (1844-1921), Eng art critic and man of letters, he introduced the works of Byron to the notice of Eng ("Studies in English Art", "Masters of Genre Painting" (1880), and "Life of Balzac").
- Weekes, Henry** (1807-77), Eng sculptor R.A. (1864), among his best productions are the group of "Manufactures," in the Albert Memorial, London, the Shelley memorial in Christchurch Abbey Hampshire, and the statue of Archbishop Sumner in Canterbury Cathedral.
- Weenix, Jan, "the Elder"** (1621-60), Dutch painter, excelled in coast scenes, ruins, and still-life, a "Hunting Scene" of his is in the National Gallery, London.
- Weenix, Jan, "the Younger"** (1640-1719), son of the above, his speciality was hunting pieces and pictures of dead game, the National Gallery, London, has a painting of dead game and a dog by him.
- Weaver, John** (1578-1632), Eng antiquary, author of "Ancient Funeral Monuments," "Epigrams," and "The Life and Death of Sir John Oldcastle" the last two interesting for the light they throw on literary history.
- Wear, Harrison William** (1824-1906), Brit, artist and writer on natural history, his chief books are "The Poetry of Nature" and "Animal Stories, Old and New," his pictures dealing with animal subjects, besides illustrations of popular publications.
- Wenhausen, Adam** (1748-1830), Ger scholar, prof. of canon law at Ingolstadt, founded in 1776 the republican free-thinking order of the "Illuminati," Goethe, Herder, and other writers favoured the scheme, which was put down by the Bavarian govt (1785).
- Wernmann, August** (1834-1914), Ger scientist, whose theory that the "germ plasma" alone determines changes in species finally disproved theory of acquired characteristics ("The Germ Plasma: A Theory of Heredity" "The Evolution Theory").
- Welch, James** (1865-1917), Eng actor, he created several parts in the earlier plays of G. B. Shaw but subsequently became a popular light comedian, achieved enormous success as Sir Guy de Vere in *When Knights Were Bold*.
- Weld, Charles Richard** (1813-69), Brit, writer, his chief work is his *History of the Royal Society*, he was a friend of Sir John Franklin, whose expedition he assisted to organize.
- Weldon, John** (1678-1736), Eng composer, pupil of Purcell and organist of the Chapel Royal, composed many songs and anthems, including *Hail my Living* and *In Thee O Lord*.
- Welhaven, Johan Sebastian Cammermeyer** (1807-74), Norwegian poet, his first poem "The Twilight of Norway" (1834) decided on account of alleged anti-national tendencies, but led the way to new movement.
- Wellley, Richard Colley, Marquis** (1760-1842), Brit statesman, elder brother of the Duke of Wellington, succeeded to the Irish title of Earl of Mornington on the death of his father, entered House of Commons (1788), Governor General of India (1797-1805), Foreign Sec. (1808-12), Lord-Lieut. of Ireland (1822, 1833).
- Wellington, Arthur Wellesley, 1st Duke of** (1769-1852), Brit soldier and politician, 1129.
- Wells, Charles Jeremiah** (1798-1879), Eng poet and friend of Keats, his dramatic poem, *Joseph and his Brethren*, first published in 1823, attracted no attention, but 40 years later was discovered and hailed as a masterpiece by D. G. Rossetti.
- Wells, Herbert George** (born 1866), Eng novelist and journalist, at 16 was a schoolmaster at Midhurst Grammar School, graduated with first class honours in zoology at London University, after a breakdown in health began to write semi-scientific romances, sociological essays, and novels ("The Time Machine", "Love and Mr Lewisham", "Kipps", "Tono Bungay", "Mr Polly", "Mr Britling Goes It Lough", "Anticipations", "A Modern Utopia", "The Outline of History").
- Wells, Sir Thomas Spencer, Bart.** (1818-97), Eng surgeon, served in the Crimean War, made a speciality of gynaecology, revived the operation of ovariectomy, in 1882 pres. of the Royal College of Surgeons.
- Wells, William Charles** (1757-1817), Brit natural philosopher, physician to St Thomas's Hospital from 1800, published in 1814 his "Essay on Dew," for which he received the Rumford medal of the Roy Soc.
- Wenceslaus** (1361-1419), King of Bohemia and Emperor, ruled with great cruelty, his efforts to settle Great Schism offended Archbishop of Mainz who brought about his deposition.
- Wendover, Roger** (died 1237), Eng chronicler, monk of St Albans, and probably a native of Wendover, Bucks, author of "Flora Hystoriarum," partly a compilation, partly a first-hand authority for the history of the time.
- Wennerberg, Gunnar** (1817-1901), Swedish poet and musician, composed Swedish

national hymn. Hear us 'widen Mother of us All.

Wensleydale, James Parks, Baron (1782-1868) Eng. judge. became a judge of the Court of King's Bench in 1828 and was transferred to the Court of Exchequer six years later. In 1856 he was created a peer.

Werner, Abraham Gottlob (1750-1817) Ger. geologist. father of Geol. Geology from 1775. teacher of mineralogy at Freiberg. (New Theory on the Formation of Mineral Veins.)

Werner, Friedrich Zacharias (1768-1823) Ger. dramatist. (Fronized by Schlegel and Madame de Staël. *Die Söhne des Thals* and *The Twenty-fourth of February*.)

Wesley, Charles (1707-89) Eng. Methodist younger brother of John Wesley. He wrote *Jesus Lover of My Soul* and over a thousand hymns.

Wesley, John (1703-91) Eng. preacher. founder of Methodism. 183.

Wesley, Samuel (1766-1837) Eng. composer. nephew of John Wesley. was a brilliant organist from childhood possessing great facility in extemporizing. His influence on Wesley's life (the God and I) is perhaps his best known work.

West, Benjamin (1738-1809) Amer. painter. came to Eng. (1763) as one of the Royal Academy (1768). (Orators and Palaces, now in the National Gallery, London. The Death of Wolfe and Death on the Pale Horse.)

Westbury, Richard Bethell, 1st Baron (1800-71) Brit. lawyer. entered Parl. in 1818. In 1825 became Solicitor General. Attorney General (1836 and 1849) he framed the Probate and Divorce and Ecclesiastical Courts Acts. was Lord Chancellor (1861-65).

Westcott, Brooks Foss (1825-1901) Brit. divine. became fellow of Trinity College (Cambridge) (1849). Canon of Peterborough (1863) and Regius professor of divinity at Cambridge (1870). In 1890 became Bishop of Durham. his writings include A Critical Survey of the History of the Canon of the New Testament in the First Four Centuries.

Westermarck, Edward Alexander (born 1868) Finnish Brit. anthropologist. born in Sweden. prof. of sociology in Univ. of London. achieved world-wide reputation by his work *History of Human Marriage* (1911).

Westinghouse, George (1846-1914) Amer. engineer. inventor of the air brake known by his name also of improved signalling system and numerous railway appliances.

Westmacott, Sir Richard (1771-1856) Brit. sculptor. b. A. (1811) his productions include the statues of Addison, Pitt, Fox and Liverpool in Westminster Abbey and the group on the pediment of the British Museum.

Westmacott, Richard (1799-1872) Brit. sculptor. son of the above. executed the sculpture on the pediment of the Royal Exchange, London. wrote *A Handbook of Sculpture: Ancient and Modern* (1864).

Weston, Dame Agnes (1840-1918) Eng. philanthropist. known as the 'savior' friend for her reorganization of a series of monthly letters to sailors at sea and many charities. My Life among the blue jackets. (1909).

Westwood, John Obadiah (1805-93) Brit. entomologist and antiquarian. held from 1861 the chair of invertebrate zoology at Oxford. his writings include *Entomologist's First Book*. a great authority on Anglo-Saxon and medieval manuscripts.

Weyman, Stanley John (born 1845) Eng. novelist. achieved his first reputation as a writer of picturesque historical novels (*A Gentleman of France*, *The Red Cockade*, *The Wild Geese*) after an interval of eleven years wrote 'The Great House' and *Ovington's Bank* (the story of a banking firm).

Whalley, Edward (died 1678) Eng. soldier. cousin of Oliver Cromwell whose major general he became fought in all the Rebellion battles and signed the death warrant of Charles I.

Wharfedale, Stuart-Wortley-Mackenzie, 1st Baron (1776-1841) Brit. politician. the leading Tory peer who supported the Reform Bill. held offices in 1834 and 1841 under Peel but was opposed to free trade.

Wharton, Edith Newbold (born 1862) Amer. novelist. her stories and novels noted for delicate treatment of complex psychological crises. The Greater Inclination (1899). The Valley of Decision (1902). The Age of Innocence (1920).

Wharton, Thomas, 1st Marquis of (1648?-1715) Eng. statesman. a leading Whig under William III and his successor. Lord Lieutenant of Ireland for two years. under Anne said to have been the author of *Millibullero* a song which sang a king out of three kingdoms.

Whately, Richard (1787-1863) Eng. divine. prof. of political economy at Oxford (1829). Archbishop of Dublin (1831). his *Manual of Logic* marked an epoch in philosophical writing.

Wheatley, Henry Benjamin (1838-1917) Eng. author. an authority on London and on Pepys. edited *Pepys' Diary* (The Story of London. Hogarth's London).

Wheatley John (born 1864) Brit. politician. was a coal miner for ten years entered Parl. (1922). Minister of Health in first Labour Government (1924) and was prominent in dealing with housing problem.

Whetstone, Sir Charles (1802-71) Eng. physicist. associated with Sir W. J. Cooke the first telegraphic instrument (1837). had a share in the invention of the steno-scope and devised an automatic telegraph and synchronized electrical clock 1866.

Wheeler, Sir Hugh Massy (1789-1867) Brit. soldier. was in command of the Cawnpore district on the outbreak of the Indian Mutiny and after a resistance of three weeks was massacred by Nana Sahib with whom he had concluded an armistice.

Whelan, Joseph (1836-1906) Amer. (civil War) (Confederate) general. after distinguished service at Shiloh and Chancellorsville took command of cavalry division of General Joseph E. Johnston's army after the took part in Sp. Amer. war.

Wheeler, William Almon (1819-97) Amer. statesman. instituted the celebrated Whelan compromise for settling political dispute in Louisiana vice pres. U.S. (1877-81).

Whewell, William (1794-1866) Eng. scientific writer. the son of a cupenter became professor of mineralogy at Cambridge (1828). master of Trinity (1841). (History of the Inductive Sciences).

Whitely, James McNeill (1834-1903) Anglo-Amer. artist. born in America and settled in England about 1859. his famous *Notman* depicting an canon of art aroused a storm of criticism which he answered in brilliantly written letters. his portraits of Carlyle and his mother and his etchings made him indisputably a master of his craft.

Whiston, William (1667-1735) Eng. divine and mathematician. Lucasian prof. of mathematics at Cambridge (1703). deprived (1710) on account of his heterodoxy. finally became a Baptist. is chiefly remembered as the translator of Josephus.

Whitman, Samuel (1758-1816) Brit. politician. entered Parl. (1790). associated with Fox as an advocate of peace, poor law reform, and popular education. impeached Henry Dundas 1st Viscount Melville for alleged dishonesty while treasurer of the navy.

White, Andrew Dawson (1832-1918) Amer. educationalist. first pres. of Cornell Univ. (1867) which institution he endowed with a school of history and political science and his own library. Amer. minister in Ger. (1879-81). European Schools of History and Politics" (1887).

White, Gilbert (1720-93) Eng. naturalist, 656.

White, Henry Kirke (1785-1808) Brit. poet. born of poor parents at Nottingham was sent to Cambridge, where he

killed himself by over study. his *Remains* were edited by Southey. wrote the hymn *Oh! in danger oft in ease*.

White, Joseph Blanco (1775-1841) Brit. author. after much religious wavering ultimately became a Unitarian. (Second Travels of an Irish Gentleman in Search of Religion) sonnet on Night and Death.

White, Sir Thomas (1492-1567) Eng. merchant. founder of St. John's College Oxford. was Lord Mayor during Wyatt's rebellion. first founder of Merchant Taylors' School London.

White, Sir William Arthur (1824-91) Brit. diplomatist. went to Serbia in 1875 as consul general. attended the Constantinople Conference (1876-7). envoy at Bucharest. he conducted the negotiations relating to Serbia and Bulgaria in 1886. ambassador at Constantinople (1886).

White, Sir William Henry (1845-1913) Eng. naval architect. director of naval construction (1888). with Sir William Armstrong designed many battleships. introduced use of turbine engines in cruisers. A Manual of Naval Architecture (1877).

Whitfield, George (1714-70) Eng. evangelist. introduced to Wesley the idea of preaching in fields. an incomparable preacher. founded Calvinistic Methodism and made seven voyages to America. 186.

Whitehead, Charles (1804-62) Brit. poet and novelist. author of *Autobiography of Jack Ketch*. Richard Savage (1842). *The Solitary* and other poems.

Whitehead, Robert (1829-1906) Eng. engineer. invented improved silk rearing machinery and the Whitehead torpedo.

Whitehead, William (1716-80) Eng. poet and dramatist. succeeded (1768) as poet laureate (1757). wrote *A Parnassic Apology for all Laureates* in response to attacks upon him. his best play *School for Scandal* produced by David Garrick at Drury Lane (1762).

Whitely, Richard (born 1840) Eng. journalist and novelist. famous for his *No. 5 John Street* (1899) a penetrating study of London alum life. (The Yellow Van. Little People).

Whitelocke, Bulstrode (1605-75) Eng. statesman. took an active part in the proceedings of the Long Parl. but opposed the trial of Charles I. (Memorials of the English Affairs).

Whitgift, John (1530?-1604) Eng. divine. having held many important offices at Cambridge became Bishop of Worcester (1577) and Archbishop of Canterbury (1583) in which office he sternly enforced uniformity.

Whitly, John Henry (born 1866) Brit. politician. he migrated the famous Whitely councils for the consideration of trade disputes. succeeded Vincent Dawson as Speaker of House of Commons (1921).

Whitlock, Brand (born 1839) Amer. diplomatist. U.S. minister to Belgium (1813-17). his efforts to secure reprieve of Edith Cavell and his handling of many difficulties due to German occupation won wide notice and approval.

Whitman, Walt (1819-92) Amer. poet. was in his early years a printer and journalist and for some years built houses in Brooklyn. *Leaves of Grass* (1855) attracted no attention until Emerson described it as the most extraordinary piece of wit and wisdom that America has yet contributed. further poetry in irregular unrhymed verse, in which he spoke freely as mystic, prophet and thinker, established his reputation. also wrote *Drum Taps*, *Democratic Vistas*.

Whitney, Eli (1765-1825) Amer. inventor. invented cotton gin for separating the seed from fibre of cotton. after many years of struggle to protect this and other valuable patents he made a fortune manufacturing firearms.

Whitmer, John Greenleaf (1807-92) Amer. poet, of Quaker parentage, was in early life a farmer's boy, shoemaker's assistant,

WHITTINGTON

and journalist sec of the Anti Slavery Society (1836) (Legends of New England) Songs of Labour National Lyrics Snow Bound Ballads of New England)

Whittington, Sir Richard (died 1428) Lord Mayor of London in 1397 1398 1406 and 1410 was a mercer lent large sums to Henry IV and his son had a share in the rebuilding of the nave at Westminster and left his fortune to the community the legend attached to his name not supported by facts

Whitworth, Charles, Earl (1752 1826) Brit diplomatist ambassador to Poland Russia and France and Lord Lieutenant of Ireland (1813 17)

Whitworth, Sir Joseph, Bart (1803 87) Eng engineer invented when at Manchester the true plane and standardized measurements of screw thread and gauges founded the Whitworth scholarship for the promotion of mechanics and engineering

Whymper, Edward (1840 1911) Eng mountaineer and explorer first to ascend the Matterhorn (1865) collected valuable notes in Greenland and the Andes of Ecuador climbed the mountain of the Great Divide (1901 5) (Scrambles Among the Alps) Zer matt and the Yeti orghans)

Wieland, Christoph (1733 1813) Ger poet and translator produced the first Ger version of Shakespeare the friend of Goethe and Herder he was one of the famous literary group at Weimar his best work Orlan (1780) an epic in 12 books an old romance

Wier Johann (1615 68) Flemish physician author of De Practica Demonum et Incantationibus et Venenarum (1664) the first great attack upon the belief in witchcraft

Wierst, Antonia (1806 65) Belg painter his work include Prometheus Christ in the Tomb and Peter and Eve wrote an *Éloge de Rubens* his house at Brussels is a gallery of his works

Wilkes, Jeremiah (1792 1836) Brit poet best known for his translation of *Lucan* his brother Benjamin (died 1867) discovered and translated the Alfabeto Christiano of Ydco de whom he also wrote a life

Wigan, Alfred (1814 78) Brit actor played with success in *Still Waters Run Deep* *The Bengal Tiger* etc and was manager of the St James's Theatre for three years (1860 63) married Leonora Pinnett (died 1884)

Wiggin, Kate Douglas (born 1859) Amer authoress her novels include *The Birds Christmas Carol* *Rebecca of Sunnybrook Farm*

Wilberforce, Samuel (1806 73) Eng prelate son of W Wilberforce an active High Church leader became Bishop of Oxford (1844) and of Winchester (1869) an able speaker in the House of Lords

Wilberforce, William (1759 1833) Brit reformer 585

Wild, Frank (born 1874) Eng explorer accompanied Capt Scott (1901-4) and Shackleton (1907 9 and 1914-17) second in command of *Quest* (1921) and took charge after Shackleton's death

Wilde, Oscar (1856-1900) Ir playwright and man of letters gained distinction at Dublin and Oxford took a prominent part in the aesthetic movement (1879) delivered art lectures in Amer (1880) plays *Lady Windermere's Fan* *The Importance of Being Earnest* also *Intentions* *The Ballad of Reading Gaol*

Wilde, Sir William (1815-76) Ir physician author of *Practical Observations on Aural Surgery* (1853) and of a *Memor of Gabriel Beranger* finished by his wife who under the pseudonym Speranza published poems and translations

Wilfrid, Saint (634?-709) Eng saint having returned from a visit to Rome took a leading part in the Synod of Whitby which adopted Roman views on the subject of Easter and other questions became Archbishop of York (665), was deprived and reinstated (667), twice subsequently he was deposed, but re-instated on appeal to the Pope

Williamina (born 1880) Queen of the

WILLIAMS

Netherlands succeeded to the crown under her mother's regency (1890) married Henry Duke of Mecklenburg-Schwerin (1901) her daughter Juliana was born (1909)

Wilkes, Charles (1801-77) Amer naval officer discovered several islands in Antarctic region caused a dispute with Great Britain by his seizure of Confederate commissioners on the *Trent* a British vessel (1861)

Wilkes, John (1727 97) Brit politician was prosecuted for his attack on the king in the *North Briton* (1763) outlawed for an impious libel on women (1764) reelected and the resolutions against him expunged (1784)

Wilkes, Sir David (1781-1841) Scot painter elected R A (1811) knighted (1838) (The Blind Fiddler) (Chel sea Pensioner) Reading the Gazette of the Battle of Waterloo)

Williams, Sir Charles (1743 1836) Brit Orientalist employed in the Bengal Civil Service published a Sanskrit grammar and several translations (1784) *Archaeologia* of Suffolk and author of (Conciliating Britannia)

Williams, William (1778 1831) Brit architect designed among other buildings St George's Hospital and the National Gallery London

Williamson, James John Garth (1811 33) Brit medical writer and biographer of Swedenborg (1849) whose *Animal Kingdom* he translated into English The Ministry of Health and many other works

William Robert (1797 1811) Brit physician author of *Description and Treatment of Cutaneous Diseases*

Williamson, John Philibert (1763 1841) Fr admiral accompanied the expedition in search of La Perouse and subsequently rendered important services in attacking the English colonies by breaking of the blockade of the Ile de France 1795 a brilliant exploit

Willé, Johann Georg (1715 1806) Ger engraver made a reputation by his prints of Gerard Douw Meers and other artists

Willens, Jan Frans (1792 1846) Dut scholar his chief work was his edition on the Dutch Language and Literature in connection with the Southern Province of the Netherlands (1813 44)

Willis, Sir James Shaw (1814 71) Brit judge was chiefly instrumental in introducing legislation for the reform of common law procedure

Willmet, William (1857 1915) Eng journalist the promoter of daylight saving

William I (1027 87) King of Eng and Duke of Normandy crowned the Conqueror defeated Harold at Hastings (1066) and received the crown put down various rivals of the English and Normans and secured his supremacy over Scotland (1072) engaged in constant war with France

William II (1056 1100) King of Eng succeeded his father (1087) obtained the help of the Eng against Robert who was supported by many of the nobles acquired Normandy (1090) his reign marked by the establishment of feudalism and a quarrel with Anselm on the Investiture question said to have been killed by an arrow while hunting

William III (1650 1702) King of Eng and Stadtholder of Holland having married Mary daughter of James II was regarded as a Protestant reserve against the latter and repelled him (1688) defeated James at the Boyne (1690) obtained the acknowledgment of his title from Louis XIV by the Peace of Ryswick (1697) prepared a grand alliance to renew the war against Louis but before he died

William IV (1769 1837) King of Eng succeeded George IV (1830) having been admiral of the fleet since 1811 assisted the passing of the Reform Bill (1832) by agreeing to create peers should it be necessary

William I (1797-1888), Ger Emperor and King of Prussia wrested supremacy of

Ger from Austria by the war of 1866 and with the help of Bismarck and Moltke defeated the Fr and took Alsace Lorraine (1870 71) proclaimed Ger Emperor at Versailles (1871)

William II (born 1858) Ger Emperor succeeded Emperor Frederick (1888) dismissed Bismarck (1890) and took active personal part in development of Ger Empire encouraged militarist and naval schemes under the plea of giving Ger her place in the sun following Versailles assassination (June 1914) declared war on Rus Fr and Bel Eng and other European powers and finally 18 A were involved in World War that ended in his downfall and abdication (1918)

William I (1772 1844) King of the Netherlands son of William I Prince of Orange served against the French in the revolutionary war was proclaimed sovereign of Holland (1813) and King of the Netherlands (1815) but by the revolution of 1830 Belgium separated from Holland of which country William remained king till his abdication (1840)

William II (1792-1849) King of the Netherlands, crowned in the Leiden university ceremony and was also present at Waterloo where he was wounded King of Holland (1840 49)

William III (1677 1702) King of the Netherlands came to the throne (1689) and did much to develop the career of Holland and to reform the finances

William of Malmesbury (died 1143) Eng historian a relation of the Celtic Regem of Glamorgan (441 216) Historia Regum Britannie (continuation) of the lives of the British Kings and their Dynasties

William the Lion (1143 1214) King of Scot came to the throne in 1167 took part in the raising of the sons of Henry II in 1172 and having been captured was compelled to do homage for his kingdom which homage was reformed by a treaty with Richard I

Williams, Bramley (born 1870) Ir actor, chief known for his impersonations of popular actors and of characters from fiction including, Michael Dwyer, Brian Hope and John Saxe

Williams Helen Maria (1761-1811) Ir writer author of *Letter from Lucia* etc arrested and imprisoned at the fall of the Girondins but subsequently released

Williams John (1542 1650) Eng divine Bishop of Lincoln and Archbishop of York (1641) was Lord Keeper from 1621 till the death of James I but was imprisoned for four years as the result of a Star Chamber prosecution instituted by James and showed that he had been held Conway Castle for the king during the Civil War

Williams, John (1796 1830) Brit missionary author of *Narrative of Missionary Enterprise in the South Seas* discovered island of Raratonga and organized a government murdered by natives at Piararua

Williams John (1811 61) Welsh scholar author of *Lectures on the Antiquities of the Canary* and editor of *Annals of Cymru* and other work in the Rolls series

Williams, Roger (1600 184) En writer and colonist founder of Rhode Island ended at Boston in 1831 and five years later settled in Rhode Island for which after a visit to England he obtained a charter (1643)

Williams Rowland (1817 70) Brit divine became professor of Hebrew and vice principal of Lampeter (1840) but had to resign in consequence of his contribution to *Says and Doings*

Williams, Samuel (1768 1833) Brit wood engraver founder of the modern school

Williams, Sir William Fenwick (1800-87) Brit general defeated Kars for over five months against the Russians but was compelled at last to capitulate (1855) received a baronetcy and a pension and was afterwards commander of the force in Canada Governor of Gibraltar and Constable of the Tower

Williams, Wilbur Matthew (1820-92) Brit scientific writer author of *The Fuel of*

- the Sun " A Simple Treatise on Heat etc
- Williamson, Alexander William** (1824-1904), Brit chemist, professor of chemistry at Univ College London (1848-87) pres of the British Association (1873) wrote among other works 'Chemistry for Students' 'On the Atomic Theory' and 'On a New Method of Gas Analysis' (with W J Huggins)
- Williamson, William Crawford** (1810-85) Brit biologist gained a reputation by the publication of 'Monographs on the Minute Organisms of the Invert' and 'On the Recent Foraminifera of Great Britain' became the first professor of biology and geology at Owens College (1861) received the Royal medal of the Royal Society for his memoir on 'Organisation of the Fossil Plants of the Coal Measures'
- Willibrord** (673-739) Eng saint Northumbrian evangelised Friesland and became Archbishop of Utrecht
- Willis, Browne** (1684-1760) Eng antiquary his chief work is 'Survey of the Cathedrals of England'
- Willis, Nathaniel Parker** (1806-87) Amer author founded and edited *The American Monthly Magazine* (afterwards *The New York Mirror*) wrote 'Pencilings by the Way' and 'Linkings of Adventure' etc
- Willis, Robert** (1800-75) Brit mechanician and writer became Jacksonian professor of natural philosophy at Cambridge (1837) invented the lyrophore and the odontograph and wrote several works on architecture - 'Remarks on the Architecture of the Middle Ages and of Italy' etc
- Willis, Robert** (1789-1878) Brit author librarian to the College of Surgeons edited the works of Harvey and wrote his life as well as those of Spinoza and Socrates
- Willis, Thomas** (1611-75) Eng anatomist author of several medical treatises on the brain and nervous system
- Willoughby Sir Hugh** (died 1554) Eng navigator prised with his crew on the coast of Labrador while in command of a trading expedition to China 1534
- Willis, William Gorman** (1828-91) Brit dramatist author of *The Man of Taste* *Charles I* *Lucius* *Love's Own* *A Knight's Dream* and other plays also wrote several novels, 'Michaelson's poem' and a 'Life of Chatterbox' and had been in early life a successful portrait painter
- Willis, William John** (1834-61) Australian explorer 1874, 1875, 1876
- Wilson Alexander** (1760-1817) Brit ornithologist was brought up as a weaver at Paisley but went to America (1784) and brought out after years of travelling and research his *American Ornithology*
- Wilson Sir Archdale** (1801-74) Brit soldier was the first to detect the mutinies during the Sepoy rising and stormed Delhi (1857) for which service he received a baronetcy and a pension from the East India Company after wounds took part in the capture of Lucknow
- Wilson, Sir Charles Rivers** (1831-1916) Brit administrator named comptroller general of the National Debt Office (1874) and after his report on the resources of Egypt was made minister of finance in that country (1877-79) became pres of the International Commission for the Liquidation of the Egyptian Debt (1880) and Pres of the Grand Trunk Railway (India) (1889)
- Wilson, Sir Charles William** (1836-1900) Brit soldier served in the Egyptian campaign (1882-83) and was head of the intelligence department in the expedition for the relief of Gordon (1885) survived Jerusalem and district (1904-05) wrote from Korti to Khartum, Lord (1911) etc
- Wilson, Sir Daniel** (1810-92) Brit philologist became pres of Toronto Univ (1881) and was author of 'Archæology and Prehistoric Annals of Scotland', 'Prehistoric Man' and other works
- Wilson, George** (1808-70), Brit reformer elected chairman of 'the Anti Corn Law League' (1849) and received a public testimonial on his retirement
- quently pres of the National Reform Union
- Wilson, James** (1806-60) Brit politician began life as a hatter but subsequently founded and edited the *Economist*, and wrote several financial pamphlets became Sec to the Board of Control financial Sec to the Treasury Vice Pres of the Board of Trade and financial Member of the Council of India
- Wilson, Sir James Erasmus** (1809-84) Brit surgeon made an extensive study of dermatology and was a skilful operator writing several works on the subject founded a chair of dermatology at the College of Surgeons and of pathology at Aberdeen and bore the cost of the passage of 'Leopold's Needle' to England
- Wilson, John** (1785-1854) Scot author also used pen name of Christopher North friend of Wordsworth and his circle published *The Trials of Margaret Lindsay* (1823) but gained his name chiefly in his criticisms published in *Blackwood's Magazine* (1822-35) became professor of moral philosophy at Edinburgh (1820)
- Wilson, John** (1804-75) Brit Orientalist went to Bombay as a missionary (1828) and became a great linguist among his works are *The Parsi Religion* *The Lords of the Bible* and *Indian Caste* his son Andrew Wilson (1831-81) wrote *With the Ever Victorious Army* an account of Gordon in China and other works
- Wilson, Richard** (1714-82) Eng landscape painter called the English Claude several of his pictures are in the National Gallery London elected R.A. (1768)
- Wilson, Sir Robert** (1777-1849) Brit general published an account of Abercromby's campaign in Egypt containing charges of cruelty against Bonaparte at Jaffa and was attached to the allied armies in the campaigns against Napoleon during almost the whole of the war M.P. for Southwark (1818-31)
- Wilson, Thomas** (1663-1750) Eng divine appointed Bishop of the Isle of Man (1677) by the Earl of Derby to whom he had been chaplain translated the Gospel into Manx and established schools
- Wilson, Thomas Woodrow** (1856-1924) 38th Pres of the U.S.A. 1913
- Wilson, Marie** (1839-1911) Eng actress 1081
- Winchester, William Paulet, Marquis of** (died 1572) Eng statesman was made marshal by Edward I and became lord high treasurer (1353) holding that office under Mary and Elizabeth he built Basing House
- Wincham, Sir Charles Ash** (1810-70) Brit general commanded the Inkermann after the fall of Sebastopol and distinguished himself in the attack on the Redan he also served in the Indian Mutiny
- Wincham, William** (1750-1810) Brit statesman elected for Norwich as a Whig in 1783 was Sec for War under Pitt for seven years after which he remained in opposition till 1806 when in the Ministry of All the Talents he resumed his former office his portrait by Reynolds is in the National Gallery London
- Winckhorst, Ludwig** (1812-91) Ger politician was minister of justice in Hanover and by his Austrian policy contributed to its annexation by Prussia after which he was returned to the Prussian Chamber and ultimately became leader of the left moderate party in the Ger Reichstag
- Windischgratz, Alfred, Prince** (1787-1862) Austrian field marshal suppressed the Slav movement at Prague in 1848 his wife being shot by the insurgents and in the same year captured Vienna from the revolutionists
- Winnemurgh, John Wilson-Patterson, Baron** (1802-92), Brit statesman entered Parl in 1830, represented Lancashire as a Conservative from 1832 to 1868 and the northern division till 1874 when he was created a peer was Chairman of committees (1852-53) Chancellor of the Duchy of Lancaster (1867-68), and Irish Sec. Sept-Dec, 1868
- Winslow, Forbes Benignus** (1810-74) Eng physician made a speciality of insanity, establishing two private asylums and publishing several works on the subject ('Plea of Insanity in Criminal Cases', 'Obscure Diseases of the Brain' etc)
- Winslow, Jacques Benigne** (1689-1760), Danish anatomist author of *Exposition Anatomique de la Structure du Corps Humain* a work frequently translated
- Winslow, John Anstrum** (1811-73) Amer naval officer when in command of the *Kearsarge* sunk the *Alabama* off Cherbourg June 19th 1864
- Winstanley, Henry** (1644-1703) Eng engineer 253
- Wint, Peter de** (1784-1849) Eng water colour painter of the old school his scenes were generally taken from the vicinity of Lincoln
- Winter, Jan Willem de** (1750-1812) Dutch admiral fled to Fr after the defeat of the Burger party and served in the Fr army but returned in 1795 was made vice admiral and was defeated by Duncan off Texel in 1797
- Winter, John Strange** (1836-1911) Eng novelist pen name of Mrs Arthur Stannard her stories of military life very popular first pres of the Writers' Club (1892) ('Boots' 'Baby House' etc)
- Winther, Rasmus Ferdinand** (1796-1876) Danish poet author of *Traenskt* ('Woodcuts') and other lyrics received a pension as state poet in 1851
- Winwood, Sir Ralph** (died 1617) Eng statesman and diplomatist was Sec of State from 1614 till his death and left a *Memorial of Affairs of State* in the Reigns of Queen Elizabeth and James I
- Wiseman, Nicholas Patrick** (1802-65) Brit Rom Cath prelate cardinal and Arch bishop of Westminster (1850) first to hold this title after restoration of hier archy he was the author of several theological works
- Wishart, George** (1613-46) Scot reformer and friend of Knox was on his return to Scot burnt for heresy having probably been concerned in plotting against Cardinal Beaton's life
- Wishart, George** (1699-1671) Scot writer chaplain to Montrose a Latin history of whose campaigns he wrote was afterwards Bishop of Edinburgh
- Wither, George** (1638-1687) Eng satirist and poet author of 'Abuses Stript and Whipt' 'Hymns and songs of the Church and Britain's Remembrance' an account in verse of the Plague during which he did good service he took the side of the party in the war and was imprisoned at the Restoration
- Witherington, William** (died 1865) Eng landscape painter whose 'Hop Garden and Stepping Stones' are in the National Gallery London
- Witt, John de** (1623-72) Dutch statesman became grand pensionary of Holland in 1653 and conducted the second war with England obtained the abolition of the office of stadtholder which however was regained by the Orange family in 1672 when the Fr invaded the country and De Witt and his brother Cornelius were murdered
- Wittgenstein, Franz von** (1769-1843) Rus-held marshal distinguished himself in 1812 against the Fr commanded the Rus and Prus forces in the campaign of 1813 and held commands in the following years
- Woffington, Margaret or Peg** (1714-80) Ir actress after brilliant success as *Alvina* in *The Recruiting Officer* acted with Garrick at Drury Lane (1742-48) most of her triumphs were in comedy *Milamant*, *Rosalind* *Lady Townley*
- Wohler, Friedrich** (1800-82) Ger chemist professor of medicine at Göttingen wrote a treatise on chemistry, and achieved the isolation of aluminum
- Wohlgenuth, Michael** (1484-1519) Ger painter and engraver master and friend of Dürer, whose portrait (now at Munich) he painted
- Wolcott, John** (1788-1819), Eng satirist, physician, and clergyman, used the pen name of Peter Pindar, author of "Lyric Odes" (against the Acad.

mirians) Peeps at St James's" and "The Louniad".

Wolf, Christian Friedrich August (1749-1824) Ger critic pupil of Heyne with whom he carried on a controversy on the subject of the authorship of the Homeric Poems. The "Prolegomena Homerica" (1796) was the first attack on the single authorship of the Iliad and the Odyssey respectively was professor of philosophy at Halle from 1783 to 1807 and afterwards at Berlin.

Wolfe, Charles (1781-1823) Ir divine and poet, author of "The Burial of Sir John Moore etc".

Wolfe, James (1727-69) Brit general served with distinction in the Austrian Succession war in the expedition against Rochefort (1757) and under Lord Amherst in North America, appointed to the command of the force sent against Quebec (1759) which he took, but fell in the battle.

Wolff, Sir Henry Drummond (1830-1908) Brit diplomatist entered Foreign Office (1848) sec to government of Ionian Islands (1857-64) entered Parl as a Conservative ten years later and in the Parl of 1880 was a member of the Fourth Party in 1889 (when he became a Privy Counsellor) he was sent on a special mission to the Sultan and after being engaged in the reorganization of Egypt was named envoy to Persia in 1887 in 1892 he became ambassador at Madrid.

Wolsley, Garnet Joseph, 1st Viscount (1833-1913) Brit general entered the army (1850) wounded in the Burmese War served in the Crimean campaign and Indian Mutiny major general (1868) and after commanding the Red River expedition (1870) was knighted, commanded the Nile expedition for relief of Gordon (1884-85).

Wolsey, Thomas (1475? 1530) Eng cardinal employed diplomatically by Henry VII and made Dean of Lincoln under Henry VIII successively Dean of York Bishop of Lincoln and Arch-bishop of York also held sees of Bath Wells Durham and Winchester became Chancellor (1530) cardinal and papal legate and aimed at being Pope his overthrow (1529) caused by jealousy of the great nobles and disagreement with the king on the divorce question founded Christ Church (Cardinal College) Oxford and built a palace at Hampton Court.

Wolverhampton Henry Hartley Fowler, Viscount (1830-1911) Brit statesman took an active part in the formation of the National Liberal Federation in 1860 he was returned for Wolverhampton in 1866 he was created a Privy Counsellor and in 1892 President of the Local Government Board he came sec of State for India in 1894 and Chancellor of the Duchy of Lancaster (1905).

Wood, Ellen (Mrs Henry) (1814-87) Eng novelist author of "East Lynne" (1861) which achieved remarkable success and was dramatized her novel "Dinesbury House" won £100 prize offered by Anti Temperance League for a propaganda story. (Mrs Halliburton's "Troubles" "The Channings").

Wood, Sir Evelyn (1838-1919) Indian general served in the naval brigade during Crimean war entered the army (1855) gained the Victoria Cross and much distinction during the Mutiny second in command in the 10er War he was sardar of the Egyptian army from 1883-84.

Wood, Sir Henry Joseph (born 1869) Eng musician (conductor of the Promenade concerts Queen's Hall London) which he partly founded composed songs and cantatas and orchestral arrangements.

Woodville, Richard Caton (born 1856) Anglo-Eng artist, travelled much in the East as a war artist and illustrated Turkish and Egyptian campaigns his battle pictures "Balaclava", "Blonheim" etc exhibited at B.A.

Woolner, Thomas (1826-92) Eng sculptor of the Pre-Raphaelite school gained a name by his "Death of Boadicea" (ex-

hibited in Westminster Hall 1844) afterwards executed statues and busts of Carlisle Tennyson Darwin Gladstone and other contemporaries became R.A. in 1874.

Woolworth, Frank Winfield (1852-1919) Amer business man developed the "penny store" idea starting with capital of \$50 the Woolworth Corporation to day owns about 1,000 stores in U.S.A. erected highest building in New York (785 ft.).

Worthington, Edward Somerset, Marquis of (1801-67) Eng nobleman and inventor after suffering exile and imprisonment for his services to Charles I during the civil war devoted himself to mechanics published (1863) his "Century of Inventions" anticipated the invention of the steam engine.

Words, Wynkyn de (died 1334) 14th cent painter 598.

Wordsworth, William (1770-1850) Eng poet visited F. in the early years of the Revolution (1790-91) gained friend-ship of Coleridge by the publication of his first poems and went to live near him in Somersetshire the friends collaborated in "Lyrical Ballads" (1798) distributor of stamps for Westmorland (1813) and henceforth lived at Rydal Mount poet laureate (1843) his highest poetical achievement "Lancelotti" "Written Near Tintern Abbey" "Ode on Intimations of Immortality" and some half dozen sonnets of great power his long philosophical poems "The Excursion" (1814) and "The Recluse" (unfinished) express deep and sincere pantheism.

Worthington-Evans, Sir Lamington (born 1868) Brit politician entered Parl (1910) occupied important minor posts during World War being Minister of Blockade (1919) sec for War (1921) Postmaster General (1924) editor in chief of "Financial News" (1924) and sec for War (1934).

Wren, Sir Christopher (1632-1723) Eng architect 297.

Wright, Sir Almaroth Edward (born 1861) Eng scientist discovered opsonin anti typhoid inoculation method and developed use of de-fibrinated cultures his methods invaluable during World War as preventives against infection of wounds.

Wright, Orville (born 1871) Amer aeronaut 342, 343, 344.

Wright, Wilbur (1867-1911) Amer aeronaut 342, 343, 344.

Wundt, Wilhelm (1832-1920) Ger psychologist regarding psychology as the science of immediate experience he studied the nature of sensation in relation to physiology called the creator of modern experimental psychology.

Wycheley, William (1640-1718) Eng dramatist of the Restoration period a master of vigorous outspoken comedy mirroring the faults and foibles of the age. (Lovers for Lovers "The Country Wife" "The Plain Dealer").

Wykeffe, John (1320? 84) Eng religious reformer he began by exposing clerical abuses but later translated the Bible and preached a literal doctrine which led the way to the Reformation the Wycliffe, star of the Reformation 1509.

Wyndham, Sir Charles (1837-1919) Eng actor served as a surgeon during the Amer Civil War inside his debut in London (1866) played Charles Bursate at New York (1869) wrote of the Criticism (1877) where Rover in "Hill Gals" and David Garrick established his reputation.

Xenophanes (circa 470-480) Grk philosopher and poet founder of the Eleatic school an early form of pantheism which postulated the unity of all things and the omnipotence of a Supreme Being.

Xenophon (430?-354? B.C.) Athenian historian as a volunteer led the ten thousand Greeks in their retreat after the battle of Cunaxa (401 B.C.) (Anabasis "Hellenica" "Memorabilia Socratis").

Yamagata, Arisano, Prince (1838-1922) Jap soldier and statesman took part in overthrow of the Tokugawa shogunate and suppressed Satsuma rebellion (1877) commanded 1st army corps China Japan War (1894-5) as Prime Minister (1898 and 1908) had great influence on development of modern Japan.

Yarrow, Sir Alfred Fernandez (born 1842) Eng engineer and shipbuilder 268.

Yeames, William Frederick R.A. (1833-1918) Eng historical painter founded with others the St John's Wood Art School his pictures of dramatic episodes in history enormously popular ("Arming the Young Knight" (1866) "Dr Harvey and the Children of Charles I" (1871) "Amy Robsart" (1877) "When did you last see your father?").

Yeats, Jack Butler (born 1871) Ir painter brother of W.B. Yeats a well known illustrator of books by T.W. Higgin and other writers of the Celtic revival.

Yeats, William Butler (born 1865) Ir poet and dramatist with Lady Gregory brought about a revival of Celtic literature and founded the Dublin Theatre movement his verses and plays deal with Irish legends and are full of Celtic fantasy and mysticism reminiscent of William Blake verse "The Celtic Twilight" plays "Cathleen ni Houlihan", "Deirdre".

Yerkes, Charles Tyson (1837-1905) Amer engineer and traffic controller developed the Chicago street system and introduced overhead railway system assisted planning of the London tube railway systems endowed Yerkes observatory.

Yonge, Charlotte Mary (1823-1901) Eng novelist and historical writer her novels marked by intense devotional spirit ("The Heir of Redclyffe" "The Dove in the Eagle's Nest" "Landmarks of History" Cameo from English History).

York, Duke of See Albert.

York, Richard, Duke of (1411-80) Eng nobleman father of Edward IV Lord Lieutenant of Ireland (1449) Lord Protector of Ireland (1454) and after the first battle of St Albans (1455) he claimed the crown but was defeated and killed at Wakefield.

Yoshinobu, Prince of Tokugawa (1817-1901) Jap statesman resigned position as shogun in favour of new Emperor and supported him in struggle with reactionary party.

Young, Arthur (1741-1820) Eng writer on agriculture for many years secretary to the Board of Agriculture his books valuable for their accurate accounts of condition of England before industrial revolution ("A Four Thousandth the Southern Counties of England" "Annals of Agriculture" "Agricultural Survey of France").

Young, Edward (1683? 1763) Eng poet chaplain to George II his "Night Thoughts" an unrequited poem containing many illuminations, lines but almost ludicrously gloomy in conception had a great vogue.

Young, James (1811-83) Eng chemist discovered a mode of distilling oil from shale and founded the Scotch mineral oil industry fitted out the expedition for the recovery of his friend Livingstone's body endowed a chair of technical chemistry at Anderson's College Glasgow.

Young, Thomas (1773-1829) Eng physicist he was the founder of physiological optics and diagnosed the eye defect of astigmatism established the undulatory theory of light and interference of light ("Lectures on Natural Philosophy and Mechanical Arts" at the Royal Institution (1807) His "Miscellaneous Works" appeared in 1826).

Young, George, 1st Viscount (born 1831) Brit politician organized the Coalition Government (1918) chairman of the Unionist party organization (1918-23).

Younghusband, Sir Francis Edward (born 1868) Eng soldier and author Brit

commissioner to Tibet (1902-4) travelled from Peking to India through (Chinese) Turkestan (1887) (The Heart of a Continent South Africa of To-day)

Yoxall, Sir James Henry (1857-1925) Eng
educationalist pres of National Union
of Teachers (1891) prominent on Royal
Commission on secondary education
(1894-9) M P for W Nottingham
(1895-1918)

Ypres, John Denton Pinkstone French,
Earl of (1852-1925) Brit soldier 1457

Ysaÿs, Eugène (born 1808) Belg. violinist, famous for his temperamental interpretations; first appeared in London (1844); conducted *Les Fêtes* at Covent

Yuan-Shi-Kai (1859-1916) Chinese statesman in international policy preserved Chinese rule in Korean peninsula until (Juno) Japanese war launched in 1909 by the Japanese after death of emperor dowager joint revolution (1911-12) was pres. of Chinese republic (1913-18)

Zacharias Saint (died 742) Pope from 741 who prohibited the Venetian slave trade and sanctioned the deposition of the Muslim sultan Ibrahim II.

Zaghlul Pasha (born 1865), 14. Nation-
alist leader. He was arrested for taking
part in Arabi Pasha's revolt, studied
law and became counsel of the Court
of Appeal (1893), while Minister of
Education and Justice took up Nation-
alist program of almost existing regime
and was dismissed, boycotted Mihri's
mission and was deported (1921) per-
mitted to return (1924).

Zabarov, Sir Basil (born 1904) Gk plant pathologist. endowed position at prominent British Imperial College established Marshall Loch professorship of plant pathology Oxford

Zaimir Alexander (born 1957) UK states man, noted for his public services as high commissioner of the protecting powers of Israel (1906-11), Premier and Governor of India, 1914, and 1917.

Zamenhof, Lazarus Ludwig (b. 9 1917)
His philologist invention of Esperanto
most scientific attempt to create uni-
fied universal language

Zanardelli, Giuseppe (b. 1863) It-
alian Minister of Justice (1898)
Premier (1901) reformed the Italian
and drew up new criminal code

Zanella, Giacomo (1820-84), It. poet

his "Vigil" remarkable for its interpretation of scientific 'evolutionary' ideas from the religious point of view, author of many noble patriotic odes.

author of many noble patriotic odes
Zangwill, Israel (born 1884) Eng (Jewish)
novelist left school teaching at Spital
fields about 1890 to take up journalism
editing *London Puck* achieved a
literary reputation by brilliant voracious
stories of Jewish life and also by novels
and plays of non Jewish character
founder and 1st pres of International
Jewish Territorial Organization (*Chil
dren of the Ghetto The Master Dreamers
of the Ghetto Mervyl Mary Anne The
Writing Pad The War God, Ioo Much
Money*

Zeller, Eduard (1814-1908) Ger philo
sopher appointed professor at Berlin
(1872) expounded modern Biblical
criticism History of Greek Philo
sophy History of German Philosophy
since Leibnitz (1875)

Zeno (342 ? 270 ? B.C.) Gk philosopher founder of the stoic school born in Cyprus was shipwrecked on the coast of Attica when trading and lost all his property became a student at Athens

Zeno (born 490 B.C.) Gk philosopher famous as the author of the paradoxes of Achilles and the tortoise and the Arrow, originated the dialectic (question and answer) mode of reasoning.

Zenobia (ruled abt 272) Queen of Palmyra married Odenathus and on his death ruled alone attempted to form a Roman empire (272) Arabians defeated

Rome empire (272) Aurelian defeated
and captured her and took her to
Rome (-74)

Zepelin, Ferdinand, Count von (1838-1917) (air inventor 1429)
 Zimmermann, Alfred (born 1860) Ger

Zimmermann, Aureo (born 1880) Ger
citizen studied for colonial prob
lems and foreign relationships Under
Sec of Foreign Office at outbreak of
World War succeeded von Jagow as
for Sec (1918) but resumed (1917)

Zinzendorf Nikolaus, Graf von (1700-60)
 Gcs religious reformer & founder of the
 Moravian settlement at Herrnhut met
 John Wesley in London (1737)

Ziska Johann (1376 ? 1424) Bohemian soldier fought in the King's army at Agincourt served in the Polish army at Lutzenberg leader of the Hussites whom he organized for victory over the Germans at Prague (1420)

Zoffany, Johann (1733-1810) Ger painter, settled in Eng (1758) and became a member of the Academy. executed portraits of George III, Gainsborough.

Wilkes Fox and many actors in character noted for his "conversation"

Zola, Emile (1840-1902), Fr novelist began life as an employee of the Hachette publishing firm at a pound a week began at twenty for the series of powerful, realistic novels dealing with the masses, a range of human experience which profoundly influenced French 19th cent literature. Ignored prominently on the side of Dreyfus (1898-99) "Contes à Ammon" (1864) "Thérèse Raquin" (1867) "Le Rougon Macquart" (1871-82)—a series of which "Le roman expérimental" and "Nana" "Germinal" (1885), "La Terre" (1888), "Le Bête Humaine" (1890) "Le Débacle" etc are the most striking

Zöllner, Johann Karl Friedrich (1834-82), Ger scientist professor of astro physics at Leipzig (1872) made valuable researches in photometry and spectrum analysis

Zorrilla, José (1817-93) Sp poet and dramatist famous for his *Don Juan Tenorio* (1844) still performed annually in Sp and Amer he died in poverty although recognised as a classic poet (*The Dagger of the Goth* *The* *Steamer*).

Zorrilla, Manuel Ruiz (1835-90) Sp politician minister of public works after the revolution (1868) minister of justice and pres of the Cortes, a supporter of Amadeus of Savoy and was his minister while king of Spain engaged in many republican conspiracies and was banished by Alfonso XII

Zuccherò, Federico (1643-1699) It painter co-operated with his brother and pupil Taddeo Zuccherò (1529-66), painted the roof of the Duomo at Florence came to England (1574) painted portraits of Queen Elizabeth Mary Stuart and others and founded the Academy of St. Luke at Rome (1582).

Zurbaran, Francisco (1598 1662) bp
painter called the Spanish Caravag-
gio a master of religious art he
decorated the high altar in Jesuit
College Church of St Thomas Aquinas,
Seville his Adoration of the Ship-
berds in National Gallery London

Zwingli, Ulrich (1484-1531) Swiss Protestant reformer served in It as a soldier visited Erasmus at Basel (1514), preached at the monastery of Einsiedeln (1516) and opposed the sale of indulgences he disagreed with Luther over the doctrine of the Eucharist

ABBREVIATIONS

Amr	American	Gk	Greek	Prus	Prussia, Prussian
Ant	Ancient	Gov	Governor	E A	Royal Academy, Royal Aca-
Ang	Anglo	Govt	Government		demician
A h A	A-estate of the Royal Aca-	Gr Bnt	Great Britain	E A M	Royal Academy of Music
	demy	Heb	Hebrew	R C	Roman Catholic
Aus	Austrian	Hol	Holland	Rlv	Railway
Bart	Barrister	Ind	India Indian	Rom	Roman
Belg	Belgian	Ir	Ireland	Roy	Royal
Bnt	British	Ir, Ire	Irish Ireland	Roy Acad	Royal Academy
Cath	Catholic	Isle	Islands	Roy Soc	Royal Society
Cent	Century	It	Italian Italy	Rus	Russia, Russian
C	Company	Jap	Japan Japanese	S	South
Cong	Congregational	Jew	Jewish	S Amer	South America, South American
Dan	Danish	Lat	Latin	Scot	Scotland Scottish
Den	Denmark	Leat	Lieutenant	Soc	Society
Dept	Department	Mfr	Manufacturer	Soc	Society
	Egypt	Midd	Middlesex	Sp Span	Spain Spanish
Eg	Egypt Egyptian	M P	Member of Parliament	St	Saint
Eng	English English	N	North	Sw Swed	Sweden Swedish
Fl	Flourished	Nor	Norway Norwegian	Switz	Swiss Switzerland
Flm	Flamish	N T	New Testament	Univ	University
For	Foreign	O T	Old Testament	U K	United Kingdom
Fr	French French	Parl	Parliament	U S, U S A	United States of America
Gen	General	Port	Portugal Portuguese	W	West
Ger	German Germany	Pres	President	Yn	Year

ERRATA

P 16, col 2 last line but one for Lionel
read Leonard

F 36, col 2 line 10, for Practically the whole of his fortune of £3,000,000 read Much of the vast wealth that he accumulated line 29, for among other bequests £100,000 read the greater part of £3,000,000

P 90, col 2, line 18, for eight hours read

P 91, col 2, par 1, the steam pressure of

the Great Eastern should have been given as 25 lb. per square inch.

P 190, inscription to illustration, line 2,
for in read may

P 212, col 2 line 11 from bottom, for Westminster Abbey read St. Paul's Cathedral
P 429 col 2, line 11 for Kilkee read Kilkenny,
line 12, for Clare read Kildare

P 488, col 1, line 7 from bottom, for Philip
read Edward, and for Walter read William

P 540, col 2, last par, the last three lines should read in 1922, and became Minister of Health in 1923 and again in 1924

P 654, col 2, line 10 from bottom, for
never read seldom

P 746, col 2, line 34, for cleanliness read

P 1410, col 2, line 10, Gilbert married Lucy Agnes, daughter of Captain Turner, in 1867

STUDY OUTLINES

In this section the story is told in miniature form of each phase of human endeavour dealt with in the main biographical groups. Each monograph relates in broad outline the gradual evolution, from the remote past to the living present, of the activities of mankind in that particular subject. In this way the student, the teacher, and the general reader may obtain a clear idea of what has been achieved, by whom it was accomplished, when it was brought about, and its relative importance. Black figures denote pages where further information is given.

A bibliography, a list of interest-questions to stimulate thought and reading, chronological and other tables, and a complete index to pictures bearing on the matter elsewhere in the volumes will be found at the end of each study.

HOW MAN OBTAINED MASTERY OF THE WORLD

Triumphs of Engineers and Inventors from the Stone Age to the Present

A COMPREHENSIVE survey of the history of invention is much more than the mere story of the evolution of machinery. It is the story of how man obtained the mastery of the world; how he rose to assume command of the rest of created things; how he raised himself from lowly beginnings to his present highly organized state. Without the divine spark of inventive genius that glowed, albeit faintly, in the mind of our earliest forefathers, man would have remained very much as he had begun. Yesterday he was hiding in caves from the wild beasts of the plains; to-day he is superior to them. With the means he has contrived he can fly faster for a more sustained period than any bird, travel under-seas faster than any fish, and traverse the land faster than any deer. He has conquered the world, and the animals are now his servants.

Instruments for Self-protection

The first important point to realize when preparing to study the progress of invention is the fact that it was the harsh struggle for existence that spurred man to use his creative faculties.

He was not so strong as some of the beasts that breathed the same air as he did, but he possessed to a greater extent than they an ally which was of more service to him than tusks and tough hides. He possessed a superior brain.

He could not grow tusks like the mammoth, but he could make almost as good weapons of defence out of the flints he saw on the ground. His brain told him how to fashion the stones, how to chip them into knives, scrapers, and axes, and this he was able to do through the medium of his hands. Without his thumbs he would have been severely handicapped in carrying out his ideas and without his more highly developed brain he would not have survived.

His first instinct was self-protection. The wooden clubs, the stone axes and spears were not originally made as weapons of offence but of defence. Prehistoric man, partly herbivorous and partly carnivorous, did not greatly care whether his food was fresh or semi-putrid. True, he could kill birds and some of the smaller mammals with his manufactured weapons, but he relished his food quite as much when it had been lying dead for some days. It was to prevent the possibility of his becoming a meal for a stronger animal that he acquired weapons of defence other than those with which nature had supplied him.

The First Cup was a Shell

Once having established a certain amount of protection for his life, his thoughts turned towards the establishment of bodily comfort. He was cold, and so he started to make coverings for himself out of the skins of animals. Later on he learned to sew the skins together with needles of bone or wood. He discovered how fire could be obtained by rubbing two pieces of wood together. This was a great discovery, for it gave him yet another ally in his struggle for existence. By the aid of fire he drove the bears and lions out of the caves and lived therein himself. He lifted up a burning brand to lighten the innermost recesses of his rock dwelling, and thus invented the first torch. He converted shells into drinking vessels so that he might quench his thirst more easily than by holding the water in the hollow of his hands. Thus was invented the first cup.

As period followed period, each of which may have extended over many thousands of years, his reasoning powers and inventive faculties became more and more developed. One discovery led to another, his life became more comfortable and secure. Man was steadily marching towards civilization. We can see

Black figures denote pages where further information is given

in museums the tools, weapons, and rude pottery that he made with his hands in the dim and distant past. They tell the wonderful story of his struggle upward.

As time went on man gradually became aware of the usefulness of the treasures that lay hidden in the earth. He found that he could fashion better weapons and implements of metal than of stone. He moulded clay into pots and drinking vessels, and baked them hard. They were more serviceable than shells.

Primitive Agricultural Implements

Ages pass. Then we see him seated in the hollowed-out trunk of a tree and propelling himself across the waters of a lake with paddles. The first boat, the forerunner of steel ships, has been launched, primitive but practical. We see him crossing from one side of a deep stream to the other by means of a tree hacked down with the help of a tool fashioned by himself. The first bridge has been built. We see him entering his lake-dwelling, climbing up to the platform by a ladder made of wood bound together with leather thongs. He has found a better home than a cave, for it offers more protection from the wild beasts and the enemies of his tribe. He has discovered a better method of smelting iron and bronze, and is gradually becoming familiar with the manufacture of agricultural implements.

"Necessity is the Mother of Invention"

So he goes on inventing and improving, until at last he invents something that is destined to divert his creative faculties into another and more intellectual channel. It is a something which ends the first of the three periods in the history of invention and heralds in the age when, for thousands of years, man practically ceased to invent. This new instrument of the human mind was writing.

As with most other great inventions it was produced at the instigation of necessity. Early man felt the lack of three important accomplishments, and the desire to supply these wants originated the art of writing. First, he could not communicate with an absent friend. Secondly, he could not assert his right to the ownership of cattle, tools, pottery, and other possessions; and thirdly, he had no means of recording any particular incident that he might wish to recall in future days.

From Drawing to Ideography

Already proficient in the art of drawing—many examples can be seen to-day on the walls of his ancient cave habitations, more particularly in France and Spain—it was but another step on the pathway of progress for

him to evolve a means of conveying ideas by pictures. These crude designs he scraped on such material as came most handy—bone, wood, bark, skins, or stone. But, at the best, ideography, as this system of writing is called, left much to be desired. It was cumbersome, and apt to lead to confusion. However, this early form of writing—known to have been used in Egypt and Babylonia as early as the year 4000 B.C.—sufficed for a time to convey the limited thoughts of primitive man. It may be noted here that the American Indians became so expert in this art of ideography that they were able to record not only events that had happened but abstract ideas as well.

How the Alphabet was Invented

As time went on, the Egyptians, Babylonians, and Chinese gradually evolved a better method of expression; they conventionalized the pictures. An eye was represented by a circle with a dot in the middle, a bull was represented by his horns. These signs were regarded as representing certain spoken sounds or syllables, and not as standing for the concrete objects themselves. The advent of this system marked the transition period between the two main stages of development in the art of writing. From hieroglyphics it was but a step to phonography, in which system a symbol represents a particular sound. Thus was the alphabet invented. We can trace its origin to Egypt, where it was used as early as 3,000 years before the birth of Christ. Although alphabetic writing never displaced the hieroglyphic system in ancient Egypt, its use gradually spread to Europe and Asia, and to-day practically the whole of the world has adopted it other than China, which still uses ideography.

ENGINEERING IN ANCIENT EGYPT

At this time, when writing was in its earliest infancy, the work of invention was considerably advanced. Certain wonderful engineering feats were carried out with skill so extraordinary that even our civilization of to-day cannot surpass them. We have only to look at the ruins in Egypt for us to appreciate the high degree of proficiency attained there.

Gigantic temples built of blocks hewn from solid stone were erected to the honour of the deities of the land of the Nile. Pharaohs constructed magnificent pyramids in which they should rest after death, and built them so solidly and well that they have stood through the tumult of thousands of years. The Egyptians were expert in the processes of spinning, weaving, and dyeing, and could work in metal with a mysterious cunning that has baffled even the master craftsmen of our time.

THE GENIUS OF ARCHIMEDES

In this second period of the history of invention a figure stands out like a tall poplar tree on a bare horizon. This prominent personality is the Greek Archimedes (1516).

The son of an astronomer, Archimedes was born at Syracuse about 287 B.C. He spent his early life studying at Alexandria, and on his return to his native city devoted himself with great zeal to mathematical research. The knowledge gained while pursuing these studies he put to a practical use, and the result was a series of inventions that had considerable influence on the progress of civilization. When the Romans laid siege to Syracuse it was through the genius of Archimedes that the city managed to hold out for three years. The Greek mathematician constructed catapults and other giant engines of warfare to repel the invading hordes. Legend has it that he made a burning mirror which so concentrated the rays of the sun that the Roman ships were destroyed as soon as they ventured within a bowshot of the defences.

The Power of the Lever

He was the first man to discover the power of the lever. Thus, perhaps, was the greatest of his discoveries, and he fully realized how immensely useful it would be to the engineers of the future. "Give me a place to stand, and I will move the earth," he once remarked. His invention of the water-screw and his adaptation of the pulley—which made possible the monster cranes of to-day—have marked him out as a man whose name will live for ever. Without these inventions tall buildings could not have been erected, neither could parched fields have been irrigated. But this is not all. A thousand and one things became possible through the creations of Archimedes' mind—from the crane to the pair of scissors—and he was the foster-father of hundreds of machines of which he never dreamed.

After his death, which occurred during the capture of Syracuse (212 B.C.), man honoured his name for the benefits he had conferred upon the people, but all his honours were not posthumous. He was one of the few inventors who reaped the rewards of his labours during his lifetime. His genius was recognized and his work encouraged.

Introduction of the Mariner's Compass

For some centuries after the appearance of Archimedes, invention does not seem to have made much progress. Existing machines and appliances were improved, but there was no outstanding creation. Man's real activity was directed towards the development of things

made possible by writing—society, which was founded on written law, history, philosophy, literature, and science.

The third period—the period of reawakening in the history of invention—began with the introduction of the mariner's compass in the thirteenth century, of gunpowder about the same time, and of printing about 1455. All these inventions were destined to have a marvellous effect upon the course of human progress.

First Use of the Compass

The true history of the magnetic compass is so enshrouded in the mists of time that it is impossible to establish its precise origin. At one time the Chinese were credited with the invention of this instrument hundreds of years before the birth of Christ, but this belief is ill-founded, and we have to come down to much later times before discovering a definite mention of it in a written work.

An Arabian writer named Bailak Kibdjaki, in a book called "Merchant's Treasure," which he published in 1282, gives a description of how a magnetized needle, floated on water by means of a small splinter of wood, was used for navigation purposes in the Mediterranean about the year 1242. He also notes that "the captains who navigate the Indian seas use, instead of the needle and splinter, a sort of fish made out of hollow iron, which, when thrown into the water, swims upon the surface and points out the north and south with its head and tail."

This, so far as can be ascertained, is one of the earliest records of the use of the compass. Gradually the crude instrument was so improved that when we reach the period of Columbus we find that it had evolved into much the same form as the compass of to-day.

The influence which the introduction of the compass had on human progress cannot be too greatly stressed. Navigation was completely revolutionized. For thousands of years mariners had been content with skirting the various known coasts and doing their sailing by day. True, they knew enough about the stars and the positions of the sun to give them a vague notion of the direction in which they were travelling, but they possessed no instruments whatever to enable them to check their course.

Opening Up the Unknown World

With the advent of the compass the mariners grew bolder. They left a way across the virgin seas, intent upon discovering some new land. Columbus (1492) set forth from Spain and found the New World, and Vasco da Gama (1498) rounded the Cape of Good Hope and opened up the sea route to the Indies. One after another the sea-dogs sailed off into the

unknown, and the knowledge with which they returned broadened the outlook of men's minds and gradually prepared the way for a new and glorious age.

The Coming of Gunpowder

About the same time in history that we find the compass being mentioned we come upon a pronouncement on the composition of gunpowder; but, like many other inventions of early times, the actual origin of the discovery is lost in obscurity. It is certain, however, that the Chinese had some knowledge of such a substance many years before Roger Bacon (417), the English Franciscan friar, wrote that "from saltpetre and other ingredients we are able to make a fire that shall burn at any distance we please." Little could he have realized the great power that lay dormant in the composition he was describing. Through gunpowder the whole art of war was revolutionized. The Norman baron was no longer safe in his castle keep; the death-knell of feudalism was already beginning to ring; the time was fast coming when army should fight against army with miles of territory separating their ranks. The general use of gunpowder diverted the course of human progress into yet another channel.

The Foresight of Roger Bacon

The full story of the life of Roger Bacon is told on another page (417-20), but he cannot be dismissed from this miniature history of invention without some passing remarks as to the peculiar foresight with which his marvellous brain was gifted.

His prophetic vision can best be shown by quoting one of the many pregnant passages which appear in his works. He is trying to awaken the minds of the people to the immense possibilities that lie hidden in the forces of nature. "Experiment" is Bacon's cry, "experiment!" He says:

Machines for navigating are possible without rowers, so that great ships suited to river or ocean, guided by one man, may be borne with greater speed than if they were full of men. Likewise cars may be made so that without a draught animal they may be moved *cum impetu inextinguibili*, as we deem the scythed chariots to have been from which antiquity fought. And flying machines are possible, so that a man may sit in the middle turning some device by which artificial wings may beat the air in the manner of a flying bird.

In this wise he foretold the mechanical propulsion of ships and the invention of motor-cars and aeroplanes. Small wonder that the superstitious people of the Middle Ages condemned Roger Bacon as a dealer in magic and threw him into prison. He was not what we might call a practical inventor, but his thoughts

and opinions greatly influenced the history of invention, for he spurred the sleeping imagination of man into a desire to wrest more power from the forces of nature.

EARLY PRINTING

Printing, the third and last great invention of this period, has influenced civilization for good more than any other discovery ever made. Victor Hugo does not exaggerate when he describes its birth as the greatest event in history:

The story of the early printers—Gutenberg, Jenson, Aldus Manutius, Caxton, Wynkyn de Worde and Pynson—will be found elsewhere (589), but let us note some of the effects the press had on the course of history.

It is related that Gutenberg visited a wood-cutter at Strasbourg and showed him a model of his press.

"I want you to make a full-sized replica of this," said the inventor.

"But it is a wine-press you are asking me to make for you," exclaimed the wood-cutter.

"Yes," replied Gutenberg, "but a wine-press from which shall soon pour out the most wonderful liquor which ever yet flowed forth to quench the thirst of man!"

If this anecdote be true, the inventor must have had great foresight, and even then it is doubtful whether he could have realized the extraordinarily revolutionary character of his invention. Five centuries of history have given ample proof that the press is the most democratic force in the world; we have only to consider how it brought about the great European change from the mediæval to the modern to be convinced of this fact.

Breaking Down Intellectual Barriers

Through the medium of the press a tremendous impulse was given to the dissemination of learning. Before printed books appeared knowledge was the monopoly of a favoured few, the clergy and the very rich people who could afford to purchase the rare and costly manuscripts. The reading public was small, and the only public libraries were those housed in such great institutions as the universities. Naturally, there were not enough manuscript books available for each student to possess a copy, so the bulk of instruction had to be given by lecturing.

The circulation of printed books changed the old order of things. It broke down the intellectual barriers and permitted the most humble man who could learn to read to become a citizen in the great new republic of letters. He could stay in his home, far removed from any university centre, and learn the same

lessons that professors at the colleges were drumming into the heads of their pupils.

On the wings of the printed page ideas and new thoughts began to fly from one country to another. Men of different nations began to learn more about each other—their modes of living, their philosophy, their discoveries in science, and their inventions. The mariner's compass made exploration possible, but it was the printing press which spread the precious knowledge obtained by the intrepid adventurers.

Power of the Printing Press

As an illustration of the power of the printing press in its earliest days we have but to recall an incident that occurred during the period of the Reformation.

Erasmus (1536), the great Dutch scholar, received a complaint from the Sorbonne that in his edition of the New Testament he had put forth certain heresies. The scholar's answer was short. "You should have spoken sooner," he replied. "It is now scattered over Europe in thousands of copies."

Galileo and the Telescope

After the invention of the printing press there seems to have been a period of non-productivity that lasted for some 150 years. Existing machines were being improved, but there was no invention of importance until 1609, when Galileo (1564-1642) made the first scientifically constructed telescope. The creation of this instrument has been attributed to one Hans Lippershey, a Dutch spectacle-maker, but though he certainly stumbled upon the fundamental principle of the telescope—an arrangement of lenses—it was Galileo, the Italian scientist, who discovered that "the results obtained by Lippershey's spy-glass depended upon the laws of perspective" (156). Galileo made other inventions of much importance—the compound microscope, the thermometer, and the pendulum (156), which was the culmination of long years of hard work and even harder thinking. Had it not been for the discovery of the latter, Huygens would not have been able to construct, in 1657, the first pendulum clock.

TELLING THE TIME

The ancient methods of telling the time were not at all accurate. At first men were content to gauge time by noting the position of the sun during the day and the stars at night. Then appeared the sundial—probably the invention of the Babylonians or some other oriental race. Even this instrument, which consisted of an upright rod throwing a shadow upon a graduated disk, was not reliable, for it told the time only

when the sun was shining. The clepsydra, invented by the Egyptians, and probably used about the same time as the sundial, told the hours by the escape of water from a vase. As the surface of the liquid sank lower and lower, certain graduated marks came into sight, or the weight of the escaping water was made to turn a pointer fixed on a dial. The "sand glass" or "hour glass," which came into use in the Middle Ages, is too familiar to need description. Up to quite a late date it found a place on the pulpit in many churches, to measure the length of the sermon. Even to-day it is still sometimes used to time the boiling of an egg.

Candle as Clock

Another form of clock was the graduated candle. This system of time measurement, if not actually invented by Alfred the Great (1514) about 883, was certainly used by him at that period. It was not until some time during the Middle Ages, however, that the clock worked by wheels and weights was invented by some unknown mechanic. The machine was much the same as the grandfather's clock of to-day. Attached to a chain or cord was a weight, which, as it gradually fell, turned a series of geared wheels which moved a pointer pivoted in the centre of a dial.

The great difficulty which the old clock-makers had to surmount was regulating the speed at which the weight fell. Various devices were used with varying success, but it was not until Galileo had discovered that the successive swings of a pendulum were made in equal times that the proper movement was obtained.

The Pendulum Clock

Christiaan Huygens (1629-1695), a Dutch mathematician, greatly interested in astronomy, found that in order to progress with his studies of the heavens he required some instrument to record exact measures of time. Here once again necessity was the mother of invention. In 1656 he made a clock wherein the descent of the weight was regulated by the movement of the pendulum, and the year afterwards he presented to the States-General the first perfect time-machine, the pendulum clock.

Having solved the problem of recording the flight of the hours, man's inventive genius once again seemed to lapse into a lethargy of non-productivity. That this should happen does not appear extraordinary when we remember how great was the discouragement meted out to inventors by both clergy and laity. At certain periods this discouragement has been more evident than at others, but perhaps, with the exception of a particular time during the

glory of ancient Greece, it has always been a significant factor in subduing the perfectly natural desire in man to create.

Tribulations of Inventors

There is a story told of how a clever craftsman at the court of a Roman emperor invented a crystal substance that would not break. Out of this substance he fashioned a large vase, and with great pride presented it to his royal master. The emperor admired the exquisite workmanship of the vase and condescendingly praised his servant.

"You are clever," he said.

But his admiration turned to profound wonder when the inventor demonstrated that the vase was unbreakable. The emperor for the second time watched the ornament dashed to the ground and receive no hurt.

"You are too clever," he said to the astonished craftsman, and ordered him to be led away to immediate execution.

A certain Alex of Provence fared no better in the seventeenth century. He had invented an automaton skeleton that played certain tunes on a guitar. One day he placed his invention in the window, where it could be seen by all the passers-by, and set the machine working. This innocent action ended his life. He was seized by the officers of Parliament, condemned for making an instrument of witchcraft and magic, and burned at the stake.

These two incidents will serve to show how, from very early times, inventors have been martyrs to the superstitious fears and jealousies of their fellow beings.

DAWN OF THE AGE OF STEAM

Almost for a century after Huygens presented the pendulum clock to the world, man's inventive genius seemed once again to fall into a slumber. We must be careful, however, not to confuse invention with discovery. Scientists were still progressing with their studies and delving into the secrets of nature, though, perhaps, this fact was then unknown to the common man. They worked mostly in secret, like the old alchemists, and so the results of their labours did not become evident until at last there broke over the world a new and wonderful dawn—the dawn of the Age of Steam.

Steam's Unknown Possibilities

It seems incredible that Man, who for thousands of years had known of steam, never fully realized its great power until the eighteenth century. Millions of people had been confronted with the same evidence of its force that set James Watt (1736) thinking of its possibilities

and so led him to invent a practicable steam engine. They had seen the white cloud of vapour hiss out from boiling kettles, and had heard the lids rattle and bump as they were moved by the expanding gas. But though they saw and heard, few understood.

A Steam Engine of the Time of Caesar

The first steam machine mentioned in history was made by Hero of Alexandria, that wise ancient who lived probably about the same time as Julius Caesar. Hero devised several forms of steam apparatus. Perhaps his earliest machine was that which he installed in an Egyptian temple to make a seeming miracle take place. The machine consisted of a burning lamp, a vessel filled with water, and a number of tubes. The water, converted into steam, pressed upon a surface of wine, which was then forced along the tubes until it poured out as a libation upon an altar. By a mechanical contrivance the figure of the god, behind which the boiler was concealed, was then made to raise its arms as though dedicating the wine. We can easily judge what effect this seeming miracle had upon the unsophisticated minds of the heathen worshippers.

Another of Hero's machines was in reality a turbine. It was a circular vessel rotated by the force of escaping steam directed upon it from certain fixed nozzles. How near the ancient Greek came to discovering the practical turbine! Had he pursued his investigations a step or two farther Antony and Cleopatra might have journeyed on the Nile on a barge propelled by steam instead of by the arms of muscular slaves.

But Hero did not pursue his investigations farther, neither did anyone who came after him until about seventeen centuries had passed away.

Heralding the Steam Turbine

Two ingenious Italians were the next to experiment, and one of them, Giovanni Branca, in constructing in 1629 a wheel capable of being turned by the impact of steam directed upon the vanes from jets, came much nearer to the discovery of the turbine than even Hero of Alexandria did. But his idea was not followed up, and so the birth of the giant liners was retarded once again.

The next contributor to the evolution of the steam engine was probably Edward Somerset, Marquis of Worcester (1591), that amazingly versatile genius who has probably, however, been credited with far more inventions than he ever achieved. In 1663 he described the workings of a pump he had made, which, with steam as its power, actually succeeded in raising

water. The pump was designed on much the same lines as one invented by Hero 1,700 years earlier.

The Marquis of Worcester evidently regarded this particular creation of his as the master-work of his genius, and it is interesting to read his own record of how he offered up an "ejaculatory and extemporary thanksgiving prayer when first with his corporeal eyes he did see finished a perfect trial of his water-commanding engine," for which, "next to his creation and redemption," he rendered the "most humble thanks ever from the bottom of his heart" for "vouchsafing him (the meanest in understanding) an insight in so great a secret of nature beneficial to all mankind as that his water-commanding engine."

Unfortunately there exists no authentic record of the Marquis's invention being put to practical use, neither does there exist any model of it. But this is not remarkable, for the times were not then ripe for any particular interest to be taken in such an engine by the public; and, moreover, the Marquis was poor, and had not the means to develop his ideas thoroughly.

Denis Papin's "Digester"

While the ingenious Marquis of Worcester was busied with his numerous inventions there flourished in England another brilliant genius—Denis Papin (1684). This man, a refugee from religious persecution in France, dreamed wonderful dreams of the great things he would do with the power of steam, but though many of his ideas did not materialize he accomplished two most noteworthy feats.

He was the first man to understand the vital necessity of the piston and cylinder, the means whereby the power of steam could be most efficiently transmitted. But although his idea was sound his method of applying it was faulty, and it was left to Thomas Newcomen (1688) to bring such an engine to perfection. Papin, who was a most versatile individual, is also said to have built a crude paddle steamer, and he devoted much time to experiments with gunpowder.

The invention of the safety-valve was his second notable accomplishment. He first used this mechanism in his famous "steam digester, or engine for softening bones," which he exhibited to the Royal Society in 1679. The "digester" consisted of a boiler with a lid made to fit tightly. The meat, fish or poultry was placed in the vessel and steam at high pressure then forced in. After a time the food became so heated that the bones were rendered soft as jelly.

Now, at the top of the boiler Papin had bored a hole and inserted a valve attached to a

heavy lever. As long as the steam in the boiler remained at normal pressure the heavy lever was sufficient to keep the valve shut, but when the pressure increased to a dangerous degree, so that had it continued the boiler would have been blown to atoms, the steam lifted the weight of the lever and escaped through the valve. John Evelyn (1587), the diarist, has left an interesting account of the supper which Denis Papin prepared in his "digester" for the members of the Royal Society; but even Evelyn with all his alertness could not foresee that it was the little valve and not the big "digester" that would matter to the world.

Newcomen's Atmospheric Engine

About the same time that Papin was employed on his steam machines, Thomas Savery (1650 ? - 1715), a military engineer, was striving to devise some method of clearing water out of mines. For this purpose he designed an engine, somewhat on the lines of the one described by the Marquis of Worcester, and to his great joy found that it fulfilled his hopes. But though it worked quite well it was not so successful as the atmospheric engine constructed later on by his partner, Thomas Newcomen (1688).

This, too, was a piston engine, but of a type more nearly approaching the present-day form. Fitted with automatic valve gear—said to have been invented by a lazy boy named Humphrey Potter, who wanted to run and play instead of standing by the engine ready to open and close the valves—the machine was installed in practically all the big mines in Cornwall and the north of England. It continued to do good work for two generations, when it was ousted by the genius of James Watt.

Fulfilling Roger Bacon's Prophecies

We have now reached a stage in the history of invention when progress made greater strides in two centuries than it had done since the beginning of civilization. A wonderful power machine had at last been perfected. The improved steam engine made by James Watt, the mathematical instrument maker of Glasgow, was ready to start its work of revolutionizing industry and transport. The time was at hand when some of Roger Bacon's wildest prophecies were to be fulfilled.

SPINNING AND WEAVING MACHINES

Already, in the industrial world, a great change had been taking place. Hargreaves, Arkwright, Crompton, and Jacquard had invented various spinning and weaving machines (1281), machines that could spin many threads at once. As a consequence the output of cotton goods increased and the demand for them became more

insistent. One day, in 1784, a quiet country clergyman named Edmund Cartwright (1265) met and talked to a man from Manchester. In the course of conversation the latter remarked that Arkwright's spinning frames were producing such a great quantity of yarn that soon there would not be enough men in Lancashire to weave it. "Then why doesn't someone invent a weaving machine?" asked Cartwright. "Impossible," he was told, "quite impossible!"

There and then the country clergyman, gifted with mechanical genius, turned to his workshop bench and began to construct such an "impossible" machine. In 1787 he took out a patent for his loom. The manufacturers would have nothing to do with it. "We have never seen one like it before!" they pleaded. Nothing daunted by this stupid rebuff, Cartwright set up a mill of his own and installed his mechanical loom and bought a steam engine to supply the necessary power. Thus was steam harnessed to do the bidding of industry.

Now, it would have been impossible for Edmund Cartwright to make use of a power to drive his loom as quickly as he wished, had not James Watt invented his improved steam engine. It would have been equally impossible for Watt to have constructed a steam engine had not the process of rolling sheet iron been known. The first rolling mill in England was established in 1728.

Watt's Improved Steam Engine

James Watt's improved steam engine brought into existence two new types of transport, the steamboat and the locomotive. How the former gradually evolved from the crude tug-boat of Jonathan Hulls to the hotel-like liner of the present-day, has been set forth in detail on page 1345. This story should be read before that on page 1009, which tells of the locomotive pioneers, for in its earlier phases the steamboat was slightly ahead of the steam engine.

RAILWAYS

Through the labours of such men as Murdoch (1009, 845, 848), Trevithick (1009) and Stephenson (1010), the railway became a practicable means of transport in 1829. It is only just over a century ago that the first line, between Stockton and Darlington, was opened, but during this period the railway progressed so rapidly that what was regarded as an ingenious toy has now proved of such enormous value that without it to-day the whole of the world's trade would be crippled. It has been said that if mankind was suddenly seized with the idea of replacing all the locomotives in the world

with their equivalent in horse-power it would not be possible to do it, for about 80 million horses would be required. Even by the middle of the nineteenth century the railways had spread a network across Europe, and as each new day passes a fresh section of line is opened up somewhere or other.

It must not be thought that the birth of the railway was easy. At every move that the pioneers of the new method of travel made they had to encounter obstacles thrust in their way by foolish, obstinate people. Engineers openly sneered at George Stephenson, and they went into the witness-box to pronounce against his schemes. He was branded as a quack and a knave. Like Robert Fulton, of steamboat fame, he could say, "Never did a single encouraging remark, a bright hope, a warm wish cross my path."

As new tracks were pushed out into the countryside the opposition became stronger. Farmers refused to allow the railway to cross their land because they had been told it would prevent their hens laying and their cows grazing. Besides, they argued, the smuts from the engine would spoil the fleece of their sheep. Noblemen complained that the noise and smoke would drive away their pheasants and foxes, and householders were loud in dismal prophecies that sparks from the locomotives would burn their houses down. Even prospective passengers were warned by kindly-meaning but sadly ignorant folk. "The boilers of the 'leaky tin kettles' will burst," they said, "and blow you all to atoms."

Despite this obstruction George Stephenson and his followers persevered with their plans, and as year succeeded year, the railway mileage gradually increased.

After a time it became evident to some of the inventor's strongest opponents that the railway could confer a boon on industry. Before the Steam Age the bulk of heavy goods was transported on the canals, of which there were about 3,000 miles then in use, but conveyance by this method was naturally slow and costly. On the other hand, shipment of goods by rail was speedy, and manufacturers soon saw that they had the advantage of their rivals if they could promise quicker delivery.

Lighthouses

It has been pointed out how one invention or discovery makes known the great need for another or the development of a certain art. This was certainly the case when the steam engine had been adapted to transportation. There was an immediate call for the improvement of existing roads to make the various stations more accessible, for the construction

of bridges to carry railways across rivers and highways, and for lighthouses, to make steamship transport safer (253-60).

Roads.

Roads were already being improved, for the two great highway makers—McAdam and Telford—had been hard at work when the nineteenth century dawned (673-80). Civil engineers saw the good roads these energetic men had made and copied their methods of construction, so that coaches no longer sank over their axles in mud or came to grief in deep potholes. Even though, as the years passed, man's knowledge of road building increased, and new methods were introduced, such as asphalt construction, no highways have ever been built so solid and enduring as those fashioned in Roman times. They have outlived the men who designed them by hundreds of years, and they are marked out for the eyes of the world by their straightness of course.

Bridges

The Romans could build wonderful bridges as well. Look at the glory of the aqueduct at Nîmes, the famous Pont du Gard! The stones laid by the hands of the slaves over a thousand years ago still stand in place, and tourists from all parts marvel at the sight. But, at first, progress in bridge construction moved slowly. Towards the end of the eighteenth century bridges were still being made of masonry or timber, but later concrete and bricks came into use. When better processes of producing iron and steel were discovered and better tools and appliances were available, many of the old types gave place to new. Metal was the ideal material for bridge construction. Yielding to tension, yet stiff in compression, it was capable of supporting heavier loads of traffic.

First Arched Iron Bridge

So with the erection of the first arched iron bridge in 1777 the wheel of evolution turned. The constructor was Abraham Darby (1750-1791), an ironfounder; and for many months curious people flocked to Coalbrookdale anxious to see how he had spanned the river Severn. But the sight of a metal bridge was soon to become quite common.

In 1793 Thomas Telford (677) erected a bridge similar to that of Darby's at Buildwas. Twenty-six years afterwards he embarked on his great project of spanning the Menai Straits, to do which he employed a type of bridge then little known in England—the suspension bridge.

The first noteworthy structure of this kind

had been built in 1819, by Sir Samuel Brown (1776-1852), across the river at Berwick. The story goes that one day, while Brown was walking in his garden, trying to think of some cheap form of structure to span the Tweed, near which he lived, he suddenly caught sight of a delicate spider's web stretching across the path in front of him. Immediately the idea flashed through his mind of a bridge built of iron wires. Though many laughed at him when he unfolded his scheme, he persevered; and having once demonstrated that the new type of bridge was successful, others of the same kind soon came into being. Three years after Telford had finished the construction of the Menai Straits bridge (677) Brown was commissioned to throw suspensions across the Eek at Montrose and the Thames at Hammersmith.

Engineers soon realized that this type of bridge was extremely useful for spanning a river, where the depth of the water or the nature of the soil would not easily allow supporting arches and piers to be placed. Besides this, a suspension bridge could be built at such a height that it did not interfere with the river traffic, an advantage which was one of its strongest recommendations.

While all the new roads and bridges were being built, the development of the locomotive and steamship was proceeding apace. The public dislike for these new methods of travel and transport gradually lessened, and the man in the street became resigned to the fact that machinery and steam had come to stay.

Agricultural Machinery

As each new year dawned more locomotives were running over a greater mileage of rails, and the stage coaches were slowly being pushed off the road (picture 674). Paddle steamers, unstable in rough seas, gave place to screw-driven vessels; sailing ships became less and less familiar. Life in big towns was made more comfortable by the adoption of gas illumination, invented by William Murdoch in 1792 (1009), and the innovation of horse buses. In the country vast stretches of land, hitherto impossible to cultivate by manual labour, were being transformed into fruitful fields of crops by the aid of new agricultural machinery from America, such as the reaping machine invented by Cyrus Hall McCormick (1809-84) in 1832. Steel was being used more and more for construction purposes, so that factories were springing up all over the country—factories in which the giant steam hammer invented by Nasmyth in 1838 (1560) was kept almost continually at work, beating out and fashioning the metal obtained by the new Bessemer process (1177).

FROM TELEGRAPH TO WIRELESS

Not a year passed by without man gaining some new power that lifted him higher still in the scale of creation. Very soon the investigations of the ever busy scientists into the mysterious properties of electricity began to bear fruit. In 1844 Morse (1093-6) invented the telegraph, and seven years afterwards the first under-sea cable was laid between England and France. Oceans were no longer a barrier between friends on different continents, news, which had hitherto travelled slowly from point to point completed its journey in a few minutes. Then came the telephone, the creation of Alexander Graham Bell in 1876 (1096), and the incandescent electric lamp, one of Edison's most important inventions (169). Guglielmo Marconi presented the gift of wireless telegraphy to the world (1), and so linked countries ever closer together. Like the life boat, invented by Henry Greathead in 1789, it has made steam transport safer and has been instrumental in saving thousands of lives.

New uses for electricity are always being discovered. It has already revolutionized the world but even now its possibilities may be greater than we can imagine.

Birth of the Motor-car

The introduction of the small internal combustion engine, invented by Daimler (1531) in 1854 showed mankind the way to get another means of transport—motor cars—and about twenty years afterwards it made possible the conquest of the air by the two intrepid Wright brothers (342). Thus were the interesting speculations of Friar Roger Bacon successfully vindicated. Fifty years ago the idea of a man flying above the clouds seated in a machine heavier than air was an idea that most folk thought preposterous, it was tempting Providence, they said. To day people scarcely trouble to look up when an aeroplane passes on its way. The impossible of to day is the commonplace of to morrow.

Invention and the World War

The world did not fully realize to what an extent engineering and science had progressed until there occurred an event which forced inventor to pit his brains against inventor, not for the weal of mankind but to work destruction. The World War of 1914-18 showed how Science might be put to dire uses.

During these four years tanks on caterpillar wheels crashed their way across No Man's Land, hurling death from specially constructed guns loaded by men protected by walls of bullet-proof steel. New forms of high explosive were

invented. New aeroplanes were made, each carrying enough bombs to destroy a street of houses. As each fresh horror appeared some antidote was invented, or else a more fearsome horror was brought forth. Over in France men dragged out their years of life crawling about in trenches, like moles in the ground, while at home the inventors were hard at work labouring to outdo each other in the production of life destroying devices.

Battleships were reinforced with new and better armour, equipped with guns of longer range and greater potency, fitted with "blisters" to render them less vulnerable when attacked by torpedo. Submarines (507) were proved to be capable of deadly service, depth charges were proved to be capable of annihilating submarines.

After the great world upheaval came the troubled years of peace, years when man was too busy reconstructing to think of creating. They, in their turn, have given place to years of reawakening, years which have made us realize the great fact that we are standing on the threshold of a wonderful new age, in which, even more than now machines will eliminate the human factor in labour.

Already *Homo sapiens* possesses a million times the power he had a thousand years ago, how much will he possess a thousand years hence? To day he has harnessed wind, sun, and river, to morrow he may harness tides. To day he can see, thrown on a screen, events which happened a few hours previously, to morrow, by means of television, he may see things as they actually happen, hundreds of miles away. In the future news may be broadcast by wireless telephony to your breakfast table and office. Gigantic air liners may take the place of steamships and trains, every man may possess his own little aerial motor car. Houses may be illuminated and warmed by stored sunlight, and cooking done by electricity.

Nothing can be branded as impossible. Even that will o' the wisp that has misled the genius of so many inventors—perpetual motion—may be run to earth when we have discovered how to harness the never failing energy dormant in the mighty atom.

Man's rise from his lowly beginnings was made possible through the tiny divine spark of inventive genius that glowed in his mind. Fostered and nurtured by the demands of necessity, the spark has assumed the dimensions of a brightly burning flame, and every day it increases in intensity. It has broken down the barriers of time and space and clothed itself with immortality. The inventors and engineers are doing much to mould the history of the world.

Notable Years and Events in the History of Invention and Engineering

- | B.C. | A.D. |
|--|--|
| 100? Earliest steam engine invented by Hero of Alexandria. | 1829. George Stephenson (1781-1848) wins with the "Rocket" a prize of £500 for a passenger-train locomotive. Weight of engine, 4½ tons; maximum speed, 30 miles per hour. Engines weighing 320 tons are now used on the Peking-Suiyuan Railway, China. |
| A.D. | |
| 1455? Johann Gutenberg (1400?-86) prints the 'Mazarin Bible.' | 1830. Liverpool and Manchester Railway opened |
| 1629. Branca, an Italian, invents a steam engine which turned a paddle-wheel by means of a jet | 1832. Reaping machine invented by Cyrus Hall McCormick (1809-84). |
| 1690. First steam engine with cylinder and piston built by Denis Papin (1647-1712?), a French physician. | 1837. Samuel Morse (1791-1872) makes his first successful experiment with the electric telegraph. |
| 1698. First practical steam engine made by Savery. | 1838. London and Birmingham Railway, the first into London, opened. Robert Stephenson (1803-59) was sole engineer. |
| 1705. Denis Papin (1647-1712?) builds an improved engine. | 1839. Steam hammer designed by James Nasmyth (1808-90). |
| 1705. Thomas Newcomen (1663-1729), a Dartmouth blacksmith, introduces his atmospheric beam engine, which was largely used for pumping water from coal mines | 1841. Screw propeller fitted in H.M.S. <i>Rattler</i> . |
| 1759. Completion of the Eddystone lighthouse by John Smeaton (1724-92) | 1844. London, Chatham and Dover Railway opened. |
| 1777. First arched iron bridge built by Abraham Darby (1750-91) at Coalbrookdale over the river Severn | 1846. North Staffordshire Railway opened. |
| 1779. Spinning mule invented by Samuel Crompton (1753-1827). | 1852. The first steamer, the <i>Chusan</i> , crosses from England to Australia |
| 1784. Steam hammer patented by James Watt (1736-1819). | 1853. High pressure steam introduced in British Navy. |
| 1787. Edmund Cartwright (1743-1823) takes out a patent for his loom | 1859. Suez Canal begun by Ferdinand de Lesseps (1805-1894) |
| 1796. Richard Trevithick (1771-1833) exhibits models of steam locomotives and introduces the high-pressure principle. | 1859. Henry Bessemer (1813-98) completes his converter, which revolutionized steel making |
| 1800. Robert Fulton (1765-1815) makes trial trips in his submarine in the Seine | 1862. H.M.S. <i>Constance</i> first warship to be fitted with a compound engine |
| 1801. Invention of electric arc lamp by Sir Humphry Davy (1778-1829) | 1874. Sir William Thomson (Lord Kelvin) (1824-1907) patents his mariner's compass |
| 1801. First steamboat appears on the Thames. | 1876. Telephone invented by Alexander Graham Bell (1847-1922). |
| 1802. William Symington (1763-1831) puts a steam engine into the <i>Charlotte Dundas</i> tug, a single stern wheeler. | 1884. Charles Algernon Parsons (now Sir) (b. 1854) invents the compound steam turbine. Many battleships and liners are now driven by this method |
| 1804. Thomas Telford (1757-1834) begins the construction of the Caledonian Canal, Scotland. | 1886. H.M.S. <i>Rattlesnake</i> first ship in British Navy to have vertical triple expansion engine. |
| 1806. Steam hammer patented by William Devereux. | 1897. The <i>Turbinia</i> launched. First vessel to be driven by Parsons' turbines; attained a speed of 34½ knots. |
| 1807. Robert Fulton (1765-1815) fits a vessel with engines designed by Boulton & Watt | 1897. Guglielmo Marconi (b. 1874) demonstrates wireless on Salisbury Plain, and sends a message four miles |
| 1812. Henry Bell (1767-1830) builds a side paddle-wheel steamer, the <i>Comet</i> , on the Clyde. | 1902. Marconi sends a wireless message from St. John's, Newfoundland, to Poldhu, Cornwall. |
| 1817. James Watt, jun. (1769-1848), makes a voyage to Holland in the first steamer to leave an English port. The engines were built at the Soho works of Boulton & Watt. | 1903. Orville Wright (b. 1871) makes the first flight on a power driven aeroplane. |
| 1819. Construction of the suspension bridge across the Menai Strait begun by Thomas Telford (1757-1834). | 1906. Airship constructed by Count Zeppelin (1838-1917) travels 60 miles in two hours |
| 1819. Suspension bridge across the Tweed at Berwick built by Sir Samuel Brown (1776-1852). | 1910. First airship to be used by the British Government flies from France to England. |
| 1821. Steam first used in the British Navy. | 1914. Panama Canal opened. Total length, 50.3 miles. Total cost, £75,000,000. Chief engineer, General G. W. Goethals (b. 1858), who became first Civil Governor of the Canal Zone |
| 1825. Stockton and Darlington Railway opened. This was the first line to carry passengers. | 1922. R.M.S. <i>Majestic</i> , built at Hamburg as the <i>Bismarck</i> , joins the Atlantic service of the White Star Line. Displacement, when fully loaded, 64,000 tons. |
| 1826. Monklands Railway, in Scotland, opened. | |
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Books for the Student on Invention and Engineering

A History of Engineering A P M Fleming and H I Brooklehurst
 The Romance of Modern Mechanism A Williams
 The Wonders of Modern Mechanism C H Cochrane
 Inventions in the 19th Century W R Doolittle
 All About Inventions and Discoveries F A Talbot
 Triumphs of Invention C Hall
 The Age of Invention F E Burns
 The Story of Great Inventions J F Burns
 Romance of Modern Invention A Williams
 The Romance of Engineering H Ferth
 The Romance of Navigation H Little
 The Electric Telegraph R Calne
 The Story of the Atlantic Telegraph H M Field
 The History of the Telephone H A Carson
 Achievements in Engineering I F Vernon Harcourt
 Conquests of Engineering C Hall
 History of the Steam Engine R H Thurston
 Romance of Modern Locomotion A Williams
 Romance of Modern Engineering A Williams
 The Story of Rapid Transit B Wilson
 Our Country's Industrial History W J Claxton
 An Outline of the History of Printing L A Liddle
 The Romance of Modern Electricity C R Gibson

Electricity in the Service of Man R W Walmsley

The Eddystone Lighthouses F P Edwards

The Romance of War Inventions F W Corbin

Aerial Navigation A L Ashm

The Mastery of the Air W J Clayton

The Romance of Modern Photography C R Gibson

The Romance of Submarine Engineering T W Corbin

BIOGRAPHY

The Creators of the Age of Steel W T Jeans

Lives of the Electricians W T Jeans

Lives of Eminent Engineers S Smiles

Lives of Boulton and Watt S Smiles

Life of George Stephenson S Smiles

Men of Invention and Industry S Smiles

Memoir of James Nasmyth S Smiles

Life of Thomas Telford S Smiles

Life of Thomas Telford T Telford

Life of James Watt J P Murdoch

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THE STORY OF EXPLORATION ON LAND AND SEA

Pioneers who Ventured all and Penetrated into the Unknown Places of the Globe

IN a certain sense the time-honoured aphorism that trade follows the flag is true. But in the early chapters of the long history of exploration, commerce and patriotism usually marched together. At sea the pennant fluttering above was the guardian angel of the goods stowed below; on land the human representative of Principality or Power toiled with his pack on his shoulders or had his merchandise carried for him on the broad backs of two-footed or four-legged companions (1624).

None knows the name of the pioneer explorer. It is more than likely that he answered to no designation. Perhaps he could not even speak. Was he of the Neanderthal type of man, whose fossil remains and rude stone implements have puzzled scientists since they were discovered in 1857, and who disappeared somewhere about the time of the last Ice Age? In any case, this extinct human species was almost certainly not our ancestor. That he travelled is beyond question, for relics of him have been found in localities far removed from the limestone cave between Düsseldorf and Elberfeld where the first remains of him were brought to light.

Hunger and danger must have been the sole objects of the expeditions undertaken by *Homo Neanderthalensis*, for this cave-dweller was both the hunter and the hunted. To him the mammoth was friend and foe—excellent food when dead; a terrible menace when living.

History likewise fails to record the pioneer navigator. He may have done nothing more than sit astride the broken and half-submerged branch of a tree that had wedged on the bank of a river and paddled with his feet to the opposite side. Perhaps the Tigris or the Euphrates was the scene of the exploit.

What the First Boats were Like

To hollow out the wood was the next important step, and craft of this kind have been found in England. In Egypt and Mesopotamia the first boats were probably made with reeds, in much the same way as children do raffia-work at school, though the frail structure would have leaked like a sieve had the builders not smeared it with bitumen, a kind of pitch they had little difficulty in getting. Little Moses was placed in an "ark" of this kind. Wicker coracles covered with the skin of an animal, such as were used by the early Britons, are still to be seen on the rivers Towy and Dee, on the west coast of Ireland, and on the Euphrates. They are built for one person, and are so light that they cannot be paddled against the stream,

but can be easily carried on one's back to and from the water. Inflated skins are still used on the Tigris in a way precisely similar to that of the Assyrians, as represented on a sculptured relief (picture 574) discovered by Sir Henry Layard (571-78).

THE VOYAGES OF THE PHœNICIANS

Thirty centuries before the birth of Christ the Egyptians were sending ships to Tyre and Sidon, the two chief city-states of the Phœnicians. These people only held a narrow strip of land on the Mediterranean at the foot of the Lebanon mountains, in North Syria, where they had settled as early as the time of Abraham. "The merchants of Zidon, that pass over the sea," are referred to by Isaiah (xxiii. 2); of Tyre the prophet Ezekiel writes, "all the ships of the sea with their mariners were in thee to occupy thy merchandise," and he also tells us much else about their activities (xxvii. 12-25). They were born traders, and the cedars of Lebanon, mentioned many times in the Bible, stood them in excellent stead. The Egyptians loaded their craft with this wood, which they needed for shipbuilding, and returned. But to the Phœnicians the transactions had greater possibilities. They copied and improved on the design of the vessels that visited them, and by means of the sea these one-time dwellers in the desert developed colonies and a large commerce.

The Earliest Picture of a Sea-going Ship

The earliest picture of a ship capable of making a voyage other than on still waters was found in the ruins of a pyramid temple near Gizeh, in Egypt. It was made some 4,700 years ago, and, strangely enough, it shows Phœnician prisoners on an Egyptian vessel. The oars are at rest, the double mast is lying on its supports in the stern, and the crew are in the act of saluting the Pharaoh.

A slab discovered in Nineveh, in the palace of Sennacherib (705-681 B.C.), shows a Phœnician war galley with two tiers of oars and two decks. On the lower deck are the rowers hard at work, and above them the fighting men with their shields. Apparently the men who furnished the motive power had no protection. The single mast is in the centre with furled sails. A conspicuous feature is the ram attached to the bow and used when opportunity occurred for sinking an enemy vessel by driving a hole in it. During the nineteenth century many British battleships were fitted with a similar weapon, though the ram did not

extend so far as in this case. The sculptor evidently possessed a sense of humour, for he shows an enormous crab catching a fish, to the evident amusement of the man on the lookout. A merchant ship near by is without either mast or ram, though an armed guard is in evidence. Both types are smaller and much higher out of the water than the Egyptian vessel already mentioned.

Countries Visited by the Phœnician Traders

The Phœnicians wove fine linen and dyed it a rich purple or a deep crimson in the fluid of a shell-fish called the murex, found off their coast, made vessels of gold and bronze, of glass and earthenware, distilled perfumes and carved ivory, and then proceeded in their vessels to dispose of their products. They laid Arabia (map, 518) under contribution for spices, incense and perfumes; Spain (Tarshish) for silver, lead and tin; Africa for gold, ivory and ostrich feathers. The blue water of the Mediterranean, bathed in yellow sunlight, is one of the most peaceful and delightful pictures that Nature can paint, but it can be angry and sullen enough at times. The hardy seamen of Phœnicia, "the Land of Palms," must have known it in all its moods, yet we find them making their way through what they called the Pillars of Hercules (Straits of Gibraltar), across the uncharted and treacherous Bay of Biscay, down the English Channel, to the Scilly Isles.

In the Royal Exchange, London, there is a magnificent painting by Lord Leighton (1552) showing these enterprising traders carrying out a deal with the ancient Britons. Gorgeous cloth is being displayed by two of the visitors with all the persuasive gestures of a modern draper. One of the Britons is offering a skin for the goods, which another of the Phœnicians is refusing with a gesture of disgust at so paltry an offer.

Africa Circumnavigated by the Phœnicians

The Phœnicians were the first of the great treasure-hunters of the south to possess the sea-vision. Without chart or compass they steered their ships at night by keeping a watchful eye on the position of the North Star. They bought and bartered with a keenness which no modern business man can hope to rival. Instead of patiently waiting for trade to come to them they sought it, and great was the material reward of their enterprise. In the Homeric poems you will find reference to them as "bringing upon their black ships a thousand frivolous things."

These commercial travellers of the Orient made their way by peaceful penetration. They

sought conquest by commerce and not by sword, with smiles instead of slaughter. Originally attracted to Cyprus by the presence there of copper mines, they used that island as a base and sailed into the Ægean to trade with Greece. They pushed their wares in Crete, and probably penetrated into the Black Sea and searched the Baltic for amber. Their hardy mariners circumnavigated Africa (608 B.C.), despite the terrors of rounding the Cape, which men in far bigger ships dreaded long after. The voyage occupied three years, and was undertaken on behalf of the Egyptians, whose supremacy they then acknowledged. The Phœnicians built a fleet for mighty Assyria, whose soldiers overran their little country many times, as the Israelites, led by Joshua, had done before them. They discovered the sea route to India, and traded with the inhabitants of Ceylon. Of the gold of Ophir (the old name for Africa), 420 talents were taken to Solomon.

Coast Colonies of Phœnicia

With no thought of building an empire, this hardy race created trading centres in other lands which became important cities. Utica was the oldest and longest-lived of their coast colonies in northern Africa, and Carthage the most important. There were others in France, Sicily, Sardinia, and Spain, where it is possible they founded the town of Cadiz. Phœnicia, in its central position between East and West, became the hub of the world's carrying trade.

A Legend about the Origin of Carthage

An interesting legend centres about the origin of Carthage, which stood on a peninsula in the Bay of Tunis, and of which only a few ruins remain to-day. Queen Dido, says the story, was compelled to fly from Tyre. Making her way to northern Africa, she arrived at the site of Carthage. There she was met by natives, from whom she begged sufficient land on which to build a home. "All I need," she told them, "is as much ground as the skin of a bull would cover." So modest was the queen's request that it was willingly granted. There would be scarcely sufficient for a tiny hut.

They reckoned without the most characteristic quality of the Phœnicians. The wily woman proceeded to cut the hide into very narrow strips, which enabled her to enclose quite a large area. There her followers built a fort called Byrsa, which means hide. Eventually Carthage (the Roman form of Karthadisha, "the New City") had a population of 700,000, became the centre of a great nation,

fought Rome in the three Punic Wars (268, 218, 149 B.C.), was razed to the ground by Scipio Africanus (1573), rebuilt by Julius Caesar (1299-1804), and finally destroyed by the Saracens in A.D. 698.

It was long before anybody found out from whence came the tin for the manufacture of the bronze articles that the Phœnicians produced with such fine taste, for quantity was never allowed to cover lack of quality. Spain and the Tin Islands (Scilly) were apparently their main sources of supply. Tradition has it that when an intruder was found in Carthage the Phœnicians showed the other side of their usually suave character and promptly threw him into the sea. It is recorded that one of their ships was voluntarily wrecked and the crew drowned to prevent a vessel that was following from finding out its destination.

African Voyage of Hanno the Carthaginian

About 500 B.C. Hanno, a Carthaginian navigator (1544), was ordered to proceed through the Pillars of Hercules with a fleet of sixty ships. In his charge, it is said, were a goodly number of emigrants, who were to establish colonies on the west coast of Africa. Landing on an island in a bay they named the Western Horn, the voyagers were terrified at night by all manner of weird happenings. According to Hanno's log, which has come down to us in a Greek translation, all went well during the day, but when darkness fell the mountains appeared to be on fire, and such strange music and agonizing shrieks rent the air that the perils of the deep were more to be desired than the terrors of the land.

No Similar Voyage for Nearly 2,000 Years

When all were safe on board the voyage was resumed. Proceeding to what they called the Horn of the South (probably the peninsula of Sierra Leone), they found another island. Here they again set foot on shore, and during the course of their wanderings discovered a lake surrounding another island. The latter was the haunt of great hairy beasts with faces like very ugly old men. Anxious to secure some of these strange creatures to take back to Carthage, they managed to capture three, though not without difficulty, for the beasts climbed great precipices and defended themselves by hurling boulders at the attackers. The captives were so unruly that the adventurers had to kill them and content themselves with their skins as trophies. Hanno called the wild creatures Gorullai, from which we get the name Gorilla, the largest of the apes. Nearly 2,000 years passed before a similar voyage along the west coast of Ophir was undertaken.

THE GREEKS AS TRAVELLERS AND EXPLORERS

Herodotus (1545), the "father of history," was something more than a mere annalist or copyist, for he gathered knowledge on events, customs and religion at first hand by seeking information in many lands. In modern times he would not be regarded as a scientific historian, because he either could not or did not weigh much of the evidence he obtained during his wanderings. We cannot ascertain for certain the exact date of his journeys, but the years 464-447 B.C. may be regarded as approximately correct. Among other places he visited the islands of the Ægean Sea, Asia Minor, Babylon, Tyre, Palestine and Egypt. If he cannot be designated as an explorer, he certainly may be regarded as a great traveller whose work did much to enlighten those to whom the outside world was a sealed book.

Alexander the Great as an Explorer

The brilliant military triumphs of Alexander the Great (1514) have had the effect of casting a shadow over his achievements as an explorer. This is due in no small measure to the fact that in 329 B.C. he reached the then farthest-known limits of northern India as a result of his prowess with the sword. Having conquered Asia Minor, Syria, Egypt and Babylon, he had already disproved his own prophecy that his father Philip II (1566) would leave no great task for his son to do, yet vast tracts of Asia still remained for him to penetrate. He would lead his warriors to "the farthest region of the inhabited world towards the east, beyond which lies the endless sandy desert void of inhabitants."

Alexander Penetrates to Turkestan

Marching through Gedrosia (Baluchistan), he founded Alexandria, where probably Kandahar (210-11) now stands. To the north of Kabul he began another city of the same name. Over the Hindu-Kush, the western spur of the towering Himalayas, shivering with cold and trudging in deep snow, the army of the conqueror forced its way, then pushed on across the burning sand with scorched feet and parched lips. To cross the river Oxus (Amu-Darya), separating Bactria and Sogdiana (now Bokhara and Turkestan), was a difficult task, for the stream was wide. The only craft available were nothing more than the hides of animals stuffed with straw or blown out with air, used by the natives then as now, and already referred to above (1606). Alexander secured as many of these as he could, and then told his soldiers to copy the former kind by filling their tents with reeds and sewing them up.

After suffering hardships almost beyond endurance, Alexander at last reached the banks of the Jaxartes (Syr Darya), the north eastern frontier of the Persian empire. Even here he could give his tried soldiers no rest, for enemies had risen in his rear, and he was forced to turn back and teach them a lesson before he could fortify his new city of Alexandria the Furthest, on which the city of Khojend in Turkestan now stands.

Confronted by the Sogdian Rock

On the opposite bank another hostile tribe appeared, and again resort was had to the skin boats. The troops made their passage under the protection of a barrage, after the manner of our soldiers in the World War, though stones hurled by wooden machines were used instead of shells fired from guns. Compelled to cross the Oxus once more, Alexander was confronted by the Sogdian Rock, a stony giant 18,000 feet high and vigorously defended. As it commanded the pass into south east Sogdiana its capture was absolutely necessary.

Offering rich rewards to a chosen band of men who had been shepherds before joining the army, the emperor told them to take their iron tent-pegs, hammer them in as they climbed, and fix ropes to them. Setting out at dead of night, seventy of the hundred soldiers who started reached the towering summit, the remainder perishing as they sought to make good their foothold on the icy crags. The enemy were so astonished that it is said that they imagined some kind of flying machine had been used and surrendered without showing fight. Among the captives was the beautiful Roxana, whom Alexander married.

The River that Gave India its Name

The victor was now ready for the conquest of what we call the Punjab, Afghanistan, and Kashmir. Former occupants of the throne of Persia had ruled this vast and wealthy territory, and Alexander was not the type of man to want less than those who had gone before him. His main reason for pushing on, however, was to open up trade routes with India. Commerce was the lodestar.

While one part of the army marched by way of the Kabul valley and the Khyber Pass, Alexander went through the countries now known as Kafiristan and Chitral, where he was obliged to fight several battles. In due course he joined the soldiers who had gone by the other route, and together they crossed the river Indus—from which India gets its name—on a bridge of boats. Alexander had ordered to be built. Here he was met by thousands of animals and many costly presents from the

friendly prince Taxiles. Porus, whose domain was on the opposite bank of the swollen Hydaspes (Jhelum) and extended to Hastinapur, on the Ganges, was less well disposed. Crossing the river some miles from his actual camp, but leaving sufficient soldiers to make Porus believe that the army was still there, he defeated the enemy, and Porus became a loyal ally.

Many hundreds of years later the battle of Chilianwalla (1849) was fought near the site of Alexander's victory. At both places the conqueror ordered a new town to be built, the one on the right side of the river he called Bucephala, after his famous war horse Bucephalus, and the other Nicaea, which means victory, and now appears on the map as Mong. Jhelum probably stands on the site of the former.

Advance to the River Beas

Crossing the broad Acesines (Chenab), Alexander advanced to the Hyphasis (Beas), and would have pushed on had he been supported by his army. The men were worn out by the exertions of their long campaign, and in no mood for further exploration. "Glorious are the deeds of those who undergo labour and run the risk of danger," their commander told them, "and it is delightful to live a life of valour and to die leaving behind immortal glory." "Do not lead us against our will," was the reply, "for you will no longer find us the same men. Let the king carry to the home of his fathers these victories, so many and so great, and then set forth anew with fresh young troops and go to the uttermost parts of the earth."

Surprised by the Rise and Fall of the Tide

So Alexander turned back, and embarking the baggage and part of his army in galleys and other ships built on the spot, proceeded along the Hydaspes, the Acesines, and the Indus, the remainder of the men marching along the banks. "The horses which were visible on the decks of the transports," notes Arrian (A.D. 100-180), who based his chronicle on contemporary narratives, "struck the barbarians who saw them with such surprise that those of them who were present at the starting of the fleet accompanied it a long way from the place of departure." All people who were not Greeks were called barbarians, just as we call those who are not British foreigners.

Founding cities and dockyards, and subduing troublesome tribes as he proceeded, Alexander at last reached the Arabian Sea. Hitherto the Greeks had seldom ventured beyond the Mediterranean, and it is therefore not surprising that the rise and fall of the tide somewhat appalled them, until it was noticed that the water came in and went out at regular intervals.

Black figures denote pages where further information is given

The conqueror put to sea with his fleet, made offerings to the gods, and, on returning, placed the vessels under the command of Nearchus, a Cretan with whom he had played in boyhood (1560). The admiral was to set sail for the Persian Gulf on a voyage of discovery, taking some of the troops with him. The object, we are told, was "to explore the coast to see what harbours and islands were there, and, if any gulf ran into the land, to sail round it; to find out what cities were on the sea-coast, and see if any of the country was fertile, and if any was deserted." In this respect it is interesting to note that probably the original home of the Phœnicians (1606) was the neighbourhood of the Persian Gulf.

Nearchus Starts on His Expedition

Nearchus started in October 325 B.C., lost three ships, had others damaged, and was compelled to fight the natives on landing at various places. Perhaps the most dramatic incident was when the crews "saw at daybreak the water of the sea being blown upward as if being borne violently aloft from the action of bellows." This was their first encounter with whales, some of which, we are told, "are thrown up on the high ground by the rough storms, and then perish and rot. When the flesh has fallen off, the bones are left, which the people use for making their houses. The large bones in their sides form beams, the smaller ones rafters, and the jawbones the doorposts."

Dividing his army, one wing to proceed via Afghanistan and the other under himself by way of Baluchistan, Alexander marched through the desert, leaving stores of food for the fleet at various places, in much the same way as Polar explorers create depots on their journey (16). The soldiers had already suffered enough, but on their return march they went through greater and ever greater hardships. Suffering from lack of food, the invalids had to be left to die so as not to imperil their comrades. At last they reached Pura, the capital of Gedrosia (Baluchistan), and there they rested.

Practical Result of the Voyage

Nearchus and his sailors landed on the Kirman coast after undergoing great hardships, and were discovered by a Greek soldier who delighted them with the news that Alexander's camp was not far off. The admiral at once made his way there, and the Emperor was so overjoyed that he wept. Bidding him continue his voyage up the Persian Gulf and proceed by the Tigris to Susa, Alexander met him there in the early months of 324 B.C. Nearchus had discovered the sea route from India to Babylonia, and Alexander had opened up a vast territory on land.

Still sighing for other worlds to conquer, Alexander gave a banquet to celebrate the setting out of Nearchus on a voyage round Arabia. He was taken ill, and died in his thirty-third year. "He would never have remained satisfied," says Arrian, "with any of the conquests he had made, even if he had added Europe to Asia, or the islands of the Britons to Europe; but would still have gone on seeking for some unknown land beyond those mentioned. I verily believe that if he had found no one else to strive with, he would have striven with himself."

THE WORK OF THE VIKINGS

The origin of the Vikings is wrapped in the northern mists from whence they came. It may be that they discovered the art of ship-building independently, though it has been suggested that they borrowed of the Phœnicians as the latter had borrowed of the Egyptians. Fortunately several of their ships have been found in grave-mounds, a specimen discovered at Gokstad, on Oslo (Christiania) fiord, being exceptionally well preserved. The craft had been used as a place of sepulture for the chieftain who owned it. Dating from about A.D. 900, the vessel is 78 feet long, 16 feet broad amidships, and has seats for sixteen pairs of rowers. The mast is carved and painted, the shields from the gunwale are either black or gold, and in addition to several oars the anchor-stock, a landing plank and parts of three small boats were included in the find.

Discovery of America before Columbus

The voyages undertaken by Columbus (765-770) led to the permanent settlement of America by white men, and he is therefore regarded as its discoverer. But actually he rediscovered it. Five hundred years before that valiant leader of mighty faith left Spain on his hazardous search for a new passage to the Indies (766) the dauntless Vikings of the North had stretched a solitary sail far out to the west and found the New World. It was entirely accidental, though there was sufficient cause for the first of their expeditions. A son's love of his father prompted it.

The Norsemen had already colonized Iceland, which they had discovered about 850, and here in 989 lived Herjulf and his son Bjarni, the latter "a very hopeful man," according to one of the old heroic Icelandic tales. The parent had sailed away for Greenland—also a Norwegian discovery—and failed to return at the time he was expected. Without more ado Bjarni, who owned a vessel, decided to go in search. At first all went well, then suddenly the wind changed and the crew soon found themselves

enveloped in fog. They were in this wretched plight for many days, when at long last the impenetrable grey lifted, and they sighted a coast covered with wood.

Bjarni decided it could not be Greenland, and steered away from the comfortless shores. He did not turn back, but sailed on for two days, when he came across a coast somewhat similar to that they had recently left but more flat. This could not be the place for which he sought, "because in Greenland are said to be very high ice-hills."

The men began to grumble, and wanted to land. The captain's answer was to turn the bow of the ship toward the open sea. So they sailed on until they came to an island with mountains and glaciers. Four days later more land was sighted. "This is the most like Greenland, according to what I have been told about it," said Bjarni, "and here we will steer for land." As they drew nearer the shore a boat was seen, and the worthy son knew that he had found his father.

Erik the Red and an Evil Omen

From Greenland Bjarni returned to Norway, where he told Earl Erik about the unknown lands he had seen, and received a considerable amount of abuse for not having explored them. But he had sown the seed, and Leif, son of Erik the Red, would not be satisfied until Bjarni had sold his ship to him. Securing a crew of thirty-five men, Leif begged his father to join him in the search. At first the old man refused, but gave in at last, and mounting his horse rode toward the beach. The horse stumbled and threw its rider. It was an evil sign, and Erik was not one to disregard such an emphatic warning. "It is not ordained," he declared, "that I should discover more countries than that which we now inhabit, and we should make no further attempt in company."

Discovery of Labrador and Newfoundland

So it came about that this early seeker for "fresh fields and pastures new" set out without his sire. "Now prepared they the ship," says the saga, "and sailed out into the sea when they were ready, and then found that land first which Bjarni had found last." Casting anchor, they made for the beach in small boats, but it was so forbidding that Leif decided that nothing was to be gained by stopping there. He took comfort in the fact that he had at least stepped on shore. "We have not done like Bjarni about this land," he told his crew, "that we have not been upon it; now will I give the land a name, and call it Helluland"—in other words Slab-land, possibly Labrador. Sailing on they came to what Leif called Markland, or

Woodland, which has been identified as Newfoundland. A little later they landed at a place where wild vine and wheat grew, hence the name Vineland. This has been thought by some authorities to be a part of New England. Here winter was spent, and in the following spring the adventurers returned to Greenland.

Fired by the wonders of a new country where fish and game were plentiful and the weather far warmer than that of their homeland, a number of would-be colonists, including Erik's granddaughter Freydis, set out for Vineland in 1006. Their leader was an Iclander named Thorfinn Karlsevne. They stayed three years, but the natives showed themselves anything but friendly and the new-comers quarrelled among themselves.

What did Columbus Learn in Iceland?

It is quite possible that when Columbus visited Iceland in 1477, as he said he did, he may have heard of the adventures of Bjarni, Leif and Karlsevne (766). So late as 1347 a ship from Greenland which had sailed to Markland had put in at one of the ports of the island, and so wonderful a series of voyages is scarcely likely to have been forgotten in a land where big events were few and far between.

Whether the famous Genoese was inspired by what he was told may never be known. "We may, I think," writes the Earl of Dunraven, "take it for granted that Columbus had heard, either in Iceland or England, rumours sufficient to convince him that land existed across the western ocean." Columbus himself writes that "to this island (Iceland), which is as large as England, the English, especially those of Bristol, go with merchandise." With him on his flagship, when the sandstone islet of San Salvador (Watling's Island) was discovered in 1492, was an Irishman from Galway.

A Chinese Tradition about America

The Chinese have a tradition that in 499 one of their countrymen, by name Hwei-Sin, set foot in some part of America. However this may be, it is certain that the early voyages of the North owed nothing to the alleged discovery of "the other half of the world" by an inhabitant of the Yellow Kingdom.

ENGLISH AND FRENCH EXPLORERS (721-1253)

The first Englishman to write an itinerary of his wanderings abroad was Willibald, nephew of the famous Boniface of Crediton, the Apostle of Germany, who set out on his long journey in 721. "We have come from the West," he told the caliph of Damascus, "where the sun has his setting, and we know of no land beyond

—nothing but water” For five years he explored Palestine with eager and delighted interest, and made his way home by way of Tyre, Constantinople, and Rome

Alfred the Great and Discovery

Britain, however, had little or no ambition to explore unknown realms until comparatively late in her history Alfred the Great (1514) showed keen interest in voyages of discovery, and although busy with affairs in his own Wessex, sent Sigehelm and Ethelstan to India, and employed Ohthere and Wulfstan, two Norse navigators, to make explorations for him Oh there, the West Saxon king tells us in his ‘Description of Europe,’ rounded the North Cape, entered the White Sea, and reached the place now known as Archangel Wulfstan sailed up the Baltic the Gulf of Riga, and the Gulf of Bothnia The Northmen were then busy trading to Arabia and the East via the Caspian and Black Sea

How the Crusades Helped English Shipbuilding

So far as is known, no English ship penetrated the Mediterranean until the Crusades If these expeditions did not altogether fulfil their advertised programme, they were certainly successful from another point of view They stimulated English shipbuilding and led to great commercial expansion though it was not the island kingdom that profited most, for Venice was then the leading sea power ‘The Pisans, Genoese, and Venetians,’ Matthew of Westminster avows supplied England with the Eastern gums as sapphires, emeralds, and carbuncles from Asia was brought the rich silks and purples from Africa the cinnamon and balm from Spain the kingdom was enriched with gold, with silver from Germany, from Flanders came the rich materials for the garments of the people, while plentiful streams of wine flowed from their own province of Gascony, joined with everything that was rich and precious from every land, wide stretching from the Hyades to the Arcturian Star” It was to the merchant princes of the Italian littoral that Europe owed the beginnings of the Renaissance

Adelard of Bath and Sæwulf

Adelard of Bath, who flourished in the twelfth century, was a writer on philosophy and the translator of Euclid’s “Elements” Although his own account of his wanderings has disappeared, and we can only glean particulars from chroniclers, he appears to have journeyed to Spain the north of Africa, Greece and Asia Minor Possibly a contemporary was Sæwulf, whose narrative has come down to us in a manu-

script copy in the library of Corpus Christi College, Cambridge Within three years of the winning of Jerusalem by the Crusaders (1099), this trader of Worcester had made his way to the Holy Land and succeeded in viewing many of the sacred sites

With letters from Pope Innocent IV (1547) in his scrip, the Franciscan friar John de Plano Carpini set off from Lyons in the spring of 1245 to visit the Grand Khan, whose encampment was near Karakorum, in Mongolia He duly reached the Mongol court, and arrived back in the autumn of 1247 Other missions followed, including that of another Franciscan friar, William of Rubrouck, who was sent by Louis IX of France (1554) in 1253 Whereas Carpini had travelled by way of Bohemia, Poland, and Southern Russia to North Central Asia, Rubrouck went via Acre, Constantinople, and the Crimea, and on his return journey crossed Armenia and Asia Minor

THE JOURNEYS OF THE POLOS

Between 1260-95 three Venetian traders, Nicolo, Matteo and Marco Polo, respectively father, uncle, and son, made a series of journeys in Asia that not only revealed something of the splendours of China, Cochín China, India, the Deccan and the Indian Archipelago, but was later to set men’s minds wondering and their feet wandering in the direction of the treasure-house of the East For Marco (1567), who started on his wanderings when in his teens, and spent many years in the service of Kúblai Khan (1550), first Mongol emperor of China, afterwards wrote a book compiled from the notes he had made which not only opened the eyes of those who were fortunate enough to read it, but awakened the ambitions of Columbus On scores of pages of the great navigator’s copy, which is still extant, are marginal notes that testify to the care and interest with which he read it Many of the places mentioned by Marco Polo, such as the Pamir or Roof of the World, Kashgar, Yarkand, Khutan, Lop-Nor and Yunnan, remained unknown other than by his notes upon them until the nineteenth century Persia, India, China, Tibet, Cochín China, Siam, Japan, Ceylon and many another land were included in the amazing itinerary of the men who first crossed Asia

It is no cause for wonder that when the three travel-stained wanderers returned home after so long an absence their own people completely failed to recognize them With grim humour the Polos convinced them by inviting them to a sumptuous feast, during the course of which they changed their gorgeous clothes several times, on each occasion cutting up the garments

they had previously worn and distributing the material among the servants. It is not surprising that "the proceedings caused much wonderment and amazement among the guests. But when the cloth had been drawn and all the servants had been ordered to retire from the dining-room, Messer Marco, as the youngest of the three, rose from the table, and, going into another chamber, brought forth the three shabby dresses of coarse stuff which they had worn when they first arrived. Straightway they took sharp knives and began to rip some of the seams and welts, and to take out from them jewels of the greatest value in vast quantities, such as rubies, sapphires, carbuncles, diamonds and emeralds, which had all been stitched up in those dresses in so artful a fashion that nobody could have suspected the fact."

Madeira Discovered by Accident

Legend has it that in 1344 Robert Macham eloped from Bristol with Anne d'Arfet, the daughter of a nobleman, and that their vessel was forced to take shelter on the then unknown island of Madeira. He was therefore a discoverer against his will. Unfortunately no mention is made of Macham in any published work previous to 1563, although the existence of the island is marked on an Italian chart of 1351. In 1360 Friar Nicholas of Lynn, or Lymne, is said to have made a voyage towards the North Pole.

DISCOVERIES IN AFRICA

The capture in 1415 of Ceuta, the North African base of the notorious Barbary pirates, in which he had played a prominent part, first attracted the interest of Henry the Navigator (1546) in what was then in very truth the Dark Continent. One of the five sons of King John of Portugal, the pursuit of learning had far more attractions for him than the gaiety and intrigue of Court life. Probably inspired by what he heard about the caravan routes of the great continent, he fitted out a number of maritime expeditions. Under his patronage Madeira, long since forgotten, was rediscovered in 1420 by Gonçalves Zarco, and colonized, the Azores were explored, and the slave-trade was begun following the arrival at Cape Blanco of Antam Gonçalves in 1441. This trafficking in blacks, which Henry afterwards endeavoured to stop, had two very definite and important results. It started an iniquitous trade that did much to preclude the opening-up of the interior of Africa, and it led to the discovery of the sea route to India. The morals of the age condoned slave raiding on the pretext that although the victims lost their liberty their souls stood a chance of being saved. In 1445

the Senegal was reached and Diniz Diaz rounded Cape Verde, while in the following year Alvaro Fernandez reached a part of the coast not far removed from Sierra Leone. Alvis Cadamosto sailed up the Senegal River and discovered the Cape Verde Islands in 1456.

In 1484, twenty-one years after the navigator's death, Diego Cam reached the Congo and claimed the territory for Portugal; in 1485 he landed at Walvis Bay, and in 1487 Bartholomew Diaz (1532) doubled the Cape of Storms, afterwards to be renamed the Cape of Good Hope by King John II of Portugal, and arrived at Great Fish River. Among those who then accompanied Diaz was Bartholomew Columbus, brother of the more famous Christopher, who is believed to have taken part in the expedition of João de Santarem and Pedro de Escobar in 1471, when the Equator was crossed.

THE DISCOVERY OF THE NEW WORLD

Had it not been for a series of unfortunate happenings, England would have been associated with the discovery, or rather rediscovery (1611) of America by Columbus (763). In 1485, seven years before Christopher set sail from the harbour of Palos (767), he had sent his brother Bartholomew to secure the interest of Henry VII (1545) in his plans. He reached England ill and poverty-stricken after having fallen into the hands of pirates, and in no fit condition to approach so august a personage or even his courtiers. By dint of drawing and selling charts, Bartholomew was able to recover the outward and visible signs of respectability, and eventually had an audience of the king, who expressed a wish to see Christopher. "But because God had reserved the sayd offer for Castile," to quote the navigator's son, "Columbus was gone in the meane space."

Voyages of Cabot and his Sons

If Henry had lost one golden opportunity through no fault of his own, he eagerly accepted the next chance that was offered to him. On the 5th March, 1495, John Cabot (1525) and his sons, Lewis, Sebastian and Sancius, were granted a patent "to sail to all places, lands, and seas, of the east, west, and north," and to annex any heathen lands that they might discover. Henry VII was financially interested in the project, "wheryn dyuers merchautes, as well of London as of Britowe, adventured goodes and sleight merchandises." With the *Mathew* and two other vessels they set out in the following May, crossed the Atlantic, and sighted what was probably Cape Breton Island, which was annexed. For this discovery Cabot, a naturalized Venetian, born like Columbus in Genoa, was

awarded the sum of £10. In 1498 he again set out, reached Labrador, Baffin Land, and Newfoundland, and cruised along the coast of Nova Scotia and New England. Cipangu (Japan), which he had hoped to reach by finding a North-West Passage, eluded his vigilance.

To India by the Cape Route

The discovery of the New World by Columbus (765) in 1492, after he had pleaded in vain with John II for his patronage in order to find a westward route to China, only made the King of Portugal the more anxious to discover a way to India by the Cape route. An expedition for that purpose under Vasco da Gama (1539) sailed in 1497, although John was then dead, discovered Natal, reached Mozambique in March of the following year, and finally arrived at the port of Calicut. The rich markets of Hindustan were thrown open to Portugal, whose ruler in 1502 was made "lord of the navigation, conquest, and trade of Ethiopia, Arabia, Persia and India" by Pope Alexander VI (1514), three years before Francisco de Almeida (1515) became the first Portuguese viceroy of India. A striking confirmation of the old adage that "It is an ill wind turns none to good" was the discovery of Japan by Europeans in 1542 or 1543—the exact date is uncertain—when a junk containing Portuguese was unable to reach Macao owing to contrary winds and arrived at Tanegashima.

In Search of a North-East Passage

After a period of service with Spain following his father's death, during which he commanded an expedition to Brazil, Sebastian Cabot (1525) returned to England and was made governor for life of the Company of Merchant Adventurers, the first of many similar concerns to be started during the next few years. The company was formed in 1551, but it was not until 1553 that its first voyage was undertaken "for the searche and discoverie of the northern part of the world by sea to open a way and passage to Cathay (China) by the North-East." Hakluyt (1543) informs us that at that time "our merchants perceived the commodities and goods of England to be in small request with the countries and people about us and near to us, and that those merchandises which strangers did earnestly desire were now neglected and the price thereof abated, though by us carried to their own ports, and all foreign merchandises in great account, certain grave citizens of London began to think how this mischief might be remedied. Neither was a remedy wanting—for as the wealth of the Spaniards and Portuguese, by the discovery and search of new trades and countries, was

marvellously increased; supposing the same to be a means for them to obtain the like, they thereupon resolved upon a new and strange navigation."

Chancellor's Visit to Ivan the Terrible

Three ships, having on board over 100 men, duly sailed from the Thames, with Sir Hugh Willoughby (934) as captain-general of the fleet and Richard Chancellor (1527) as pilot-general. After reaching one of the Lofoden Islands, they encountered a furious gale, and Chancellor's vessel parted company from the others. For several weeks the *Bona Esperanza* and the *Bona Confidentia* cruised about in the Arctic, trying in vain to reach the harbour of Vardö, in Norway. At length Willoughby entered the mouth of the Arzina, in Lapland. Little exploration parties were sent off in the hope of finding inhabitants, but without success, and all perished. Their remains were afterwards discovered together with the journal which the captain-general had kept. Chancellor was more fortunate. He managed to make Vardö, and there he awaited for a time the coming of his colleagues. When he had stayed there for what he considered was a reasonable time, the pilot-general headed for the White Sea, and eventually landed near the site of Archangel. News of the visitors was conveyed to Ivan the Terrible (1547) at Moscow, who extended an invitation to Chancellor to visit him at his court at Moscow. The explorer travelled nearly 1,500 miles by sledge, and was much impressed by the cordiality of his reception by the Tsar, though he qualified his admiration for Muscovy itself.

Russia was not unknown to Englishmen, but Chancellor's expedition took down the shutters from the shop window of the country, to use a commercial simile. The Tsar expressed his willingness for ships to be sent, and said that if an ambassador be sent "to treat with us, whereby your merchants may with all kinds of wares, and where they will, make their market, they shall have their free mart with all liberties through my whole dominions, to come and go at their pleasure." In the same year (1553) that Chancellor and Willoughby had set out, Anthony Jenkinson was completing his wanderings in Turkey, Syria, the Holy Land, and various countries on the Mediterranean. He was afterwards to become captain-general of the Muscovy Company's fleet, to make his way to Khiva, Bokhara and Astrakhan. His name figures on the scroll of famous explorers as the first Englishman to penetrate into Central Asia.

In 1555 Chancellor undertook a second voyage to Russia, and in the following year

returned with an ambassador from Ivan. Off the east coast of Scotland the *Edward Bonaventure* foundered. Not a man was saved other than the Tsar's representative; the grand pilot, his crew, and the Russian's suite perished.

Six years after this disaster Robert Baker weighed anchor in the October of 1562 for the Guinea coast. Although his cargo was plundered and he was wounded, the dauntless Englishman made a second voyage a few months after his return in 1563. Fate again played him false, for while Baker and some of his crew were on shore the ships dragged their anchors and the luckless traders had to fend for themselves. Of the nine men who were thus left, only three were found alive when they were discovered by the officers of a French vessel, who took them prisoners and conveyed them to France. There is evidence that they were eventually released, but beyond the fact that he was rescued history knows nothing authentic of Baker after 1563.

First Englishman to Reach India by Sea

The first English traveller to reach India by rounding the Cape of Good Hope was Thomas Stevens in 1579, several years before Ralph Fitch, J. Story, John Newberry, and W. Leedes, merchants of the Levant Company, succeeded by the overland route. Leaving London in 1583, the party reached Biredjik, on the Euphrates, via Tripolis and Aleppo. By boat they proceeded to Feltjah, crossed on camel-back to Bagdad, and then sailed down the Tigris to Bussorah, on the Persian Gulf. Arriving at Ormuz, they were clapped into prison by the Portuguese governor and afterwards transported to Goa, on the west coast of India, and the centre of Portuguese influence in the East.

It was the aforementioned Thomas Stevens, now turned a Jesuit monk, together with another of the same persuasion, who went surety for the good conduct of the four distressed adventurers. With the exception of Story they contrived to escape, and after crossing the Deccan, visited various towns until they arrived at the Court of the Great Mogul. Newberry is believed to have been done to death, and Leedes entered Akbar's service, but Fitch went on, and included Burma, Malacca, Siam, Ceylon, Malabar, and Bengal in his wanderings. He then made his way back by way of Goa, Ormuz, Bussorah, Urfah, Bir and Tripolis, and finally saw the coast of England after an adventurous journey of eight years.

What the "Pope's Line" Means

At the time of the discovery of the New World Pope Nicholas V (1561) had invested the Portu-

guese with all lands discovered during their voyages to the south and east. Some time later Pope Alexander VI (1514) decided that all territory to the west of a line drawn 300 miles west of the Azores should belong to Spain, and that on the east to Portugal. The latter is usually referred to as the Pope's Line. England's queen and her sailors frankly refused to abide by the decision. To one master mariner in particular, a certain Francis Drake (1571-1582), the decision was anathema. His creed was "To seek God's enemies and her Majesty's where they may be found"; and he lived and died for it. He it was who, having plundered Nombre de Dios, "the Treasure-house of the World," was the first Englishman to gaze on the Pacific.

Frobisher Enters Frobisher Bay

After lying dormant for so long, practical interest in the discovery of a North-West Passage to the east (1614) was aroused by Martin Frobisher (1539), who made no fewer than three attempts to solve the mystery, and went farther north in his search than any of his predecessors. It is scarcely credible that on his first voyage, made in 1576, he set out from Deptford with two vessels of twenty-five tons—that of an ordinary fishing-smack of to-day—and a pinnacle of ten tons. The last-mentioned foundered off Cape Farewell, Greenland, and one of the larger ships either deserted or lost sight of Frobisher and returned home. Sailing on, he reached "a new land of marvellous great heith, which they judged to be the land of Labrador," and entered Frobisher Bay, which he believed to be a strait. Deciding that the land on the right was Asia, he returned to England after an absence of only four months, taking with him a lump of "mynerall" which he believed to be gold. Actually it was not the precious metal at all, although there were those who said that it was when the stuff was examined in London. The results of the voyage, from a popular point of view, were decidedly encouraging, and for his second voyage, undertaken in 1577, Frobisher had three vessels, including one provided by Queen Elizabeth (1316), who was never backward in lending her support to a venture if she thought it likely that she would reap a financial advantage. Once again Frobisher Bay was entered, though more prospecting than exploration was done, and some 200 tons of ore were loaded, despite hostile Eskimo. When Frobisher returned to England, so great was the enthusiasm that it was deemed necessary to put the cargo in safe custody, and not all in the same place, so part was stored in Bristol Castle and the remainder in the Tower of

London, where it was guarded with the care now bestowed on the Crown jewels. Apparently both gold and silver were discovered, though the samples do not appear to have been particularly rich in quality.

Greenland becomes West England

However, the results were deemed sufficiently good to warrant a third and larger expedition to search for the elusive North West Passage and the equally elusive metal. No fewer than fifteen vessels sailed in 1578. On landing in the south of Greenland the opportunity was taken to rechristen it West England. A barque was wrecked, and the fleet was forced to enter a hitherto unknown strait, to be afterwards explored by Hudson and named after him, but eventually managed to reach Frobisher Bay, on the shores of which, christened by Queen Elizabeth *Meta Incognita*—the Unknown Goal—an unsuccessful attempt was made to found a settlement. The fleet returned with a further cargo of ore, which proved to be even inferior to that which was brought back by the second expedition. Frobisher took no further part in exploration, but he served valiantly on active service, and took part in the great victory over the Armada (1587).

First English Circumnavigation of the World

Drake had also been busy. Sailing from Plymouth in the last month of 1577, he was lost to sight until November 1580, when he returned to the homeland having completed the first English circumnavigation of the globe. The second Englishman to follow Drake's lead was Thomas Cavendish, who circled the world in 1586-89.

Work of Davis and Baffin

Undeterred by the failures of Frobisher, John Davis or Davys (1531), the friend of the Gilberts and Raleigh, put to sea in 1585 to find the North-West Passage that was destined for so long to be a will-o'-the-wisp to its would-be discoverers. He reached Baffin Land, and entered Cumberland Sound. He felt convinced that the latter would lead him to China, but as he did not know "the length of the strait and dangers thereof," he decided to return to England and renew his search the following year. His expedition of 1586 accomplished very little owing to ice and intense cold, but in the following May he returned with renewed zest to the chase, only to be thwarted by "frisking gales" and other difficulties. However, he had blazed a trail for other explorers by mapping the coast of South Greenland, Labrador, and south-east Baffin Land. In later years (1601-3) Davis became the first pilot on the initial voyage

undertaken by the East India Company, the great trading concern that developed into an empire. Baffin Bay itself was explored in 1616 by William Baffin, who also discovered Smith's Sound, Lancaster Sound, and a number of other inlets and promontories. For over two centuries and a quarter his record of "farthest north" (77° 45') remained unbeaten.

England's First Settlement in America

In 1584 Sir Walter Raleigh (1213-20) obtained a charter authorizing him to discover and occupy any lands in the New World not in the possession of a Christian nation (1218), and in the following year England's first settlement in America was made in Virginia, although it did not prove permanent. Bartholomew Gosnold, who had been in Raleigh's service, and was the discoverer of Cape Cod and Buzzard's Bay in 1602, took part in the founding of the settlement of Jamestown five years later. John Smith (1580-1631), who afterwards became head of the colony, sailed nearly 3,000 miles exploring the coast and bay of Chesapeake. Raleigh himself, seeking for elusive El Dorado, navigated the Orinoco River.

First English Ambassador in India

Soon after the East India Company (*see above*) had established its first factory in Surat, Sir Thomas Roe (?1581-1644) was sent to the Court of the Great Mogul as the first English ambassador. He did far more than to seek and obtain permission from Jehangir for the establishment of additional trading stations, and to smooth away difficulties, for he spent considerable time and money in personal travel, and added much to the knowledge of the geography of India.

First English Settler in Japan

At the opening of the seventeenth century a law was promulgated that foreigners might live in any part of Japan, provided they did not try to obtain converts to their individual religious beliefs. The first Englishmen to reach that country were members of a sick crew, of whom William Adams was the most notable figure. The latter accidentally made Bungo in 1600, thirteen years before Captain John Saris arrived with the first cargo of English goods. Although Adams, who afterwards entered the service of the East India Company, died in 1620, a yearly festival is still held in his honour.

Henry Hudson and the Pilgrim Fathers

The expeditions of Henry Hudson (1593) in 1607, 1609 and 1610 still left the issue of a possible North-West Passage undecided, though

he thoroughly explored the Bay named after him. The same intrepid navigator also failed in 1608 to find the North East Passage. The Pilgrim Fathers, who left Plymouth in the *Mayflower* in 1620, also explored the coast of their new home to some extent before they finally determined to settle at the place within the tip of Cape Cod already named after the old home port, and which one of the storm-tossed immigrants referred to as "full of woods and thickets."

THE EXPLORATION OF AUSTRALIA

After an adventurous career of sacking, plundering, and burning as a buccaneer, William Dampier (1531) was given a command in the British Navy in 1699 for the purpose of exploring the coasts of Australia and New Guinea. He had already visited the great island continent in 1687-88 in the first English ship to reach that part of the world, but on his second expedition he found the land so inhospitable that he soon left it, and, discovering New Britain, concentrated his energies on surveying some of the coast of the largest territory of the Bismarck Archipelago group, much of which still remains undeveloped. During the course of his wanderings Dampier sailed round the world no fewer than four times.

Buccaneers and Geographical Knowledge

Another buccaneer, Sir Henry Morgan (1559), must not be omitted, for his attack on Panama in 1670 reopened, to quote Professor C. R. Beazley, "the English way to the great Southern Sea, where the buccaneers laid afresh a foundation for much of our geographical knowledge of the Pacific, though Anson and later travellers often complain of the looseness or falsity of their statements."

Annexation of the Falkland Islands

The circumnavigation of the globe by Anson (1516) in 1740-44, although not undertaken primarily for scientific purposes but to harm the Spaniards, accomplished much that was useful, and by the publication of the chaplain's record shed a flood of light on the world's dark corners—Patagonia and other parts of South America—and blazed abroad one of the most heroic stories in British sea history. The book is still widely read. John Byron (1723-86), who had served with Anson, went on a voyage of discovery in the South Seas in 1764-66, but only discovered a number of islands of the Low Archipelago group and annexed the Falkland Islands. His lieutenant, Philip Carteret, was vastly more successful, for he discovered Pitcairn Island in 1767, afterwards to be inhabited by the mutineers of the *Bounty*,

Osnaburg, New Ireland, and various other new lands, including the Sandwich, Queen Charlotte, and Admiralty islands.

Cook Hoists the British Flag in Australia

Captain James Cook (849), who started life as a draper's assistant, and surveyed a greater stretch of coast than any other navigator, set off in 1768 for Tahiti, having on board the *Endeavour* a band of scientists intent on observing the transit of Venus. This successfully accomplished, many of the neighbouring islands were visited, and New Zealand, hitherto believed to be part of the mainland of Australia, was circumnavigated. In 1770 Cook anchored in Botany Bay, New Holland (Australia), and hoisted the British flag. On his second voyage he found further units of the Society Islands and also discovered New Caledonia. During his third cruise to the South Seas he discovered the Cooks, Sandwich and various other islands, and, sailing beyond Bering Strait, sought the North West Passage. Owing to ice he could get no farther although he sighted the two continents of Asia and America within twenty-four hours.

Work of Bass and Flinders

For a considerable time the greater part of Australia was a land of trackless, unknown wastes. With splendid fortitude George Bass, a naval surgeon, and Captain Matthew Flinders surveyed part of the coast. In a small boat, appropriately called *Tom Thumb*, and with a solitary crew of one boy, they explored George's River and Port Jackson River, and later charted Bass Strait, between Tasmania and Australia, and also Flinders Island. In 1801 Flinders circumnavigated the continent and charted the Gulf of Carpentaria.

Penetrating to Australia's Heart

In 1813 three colonists named Blaxland, Lawson and Wentworth went on an exploring expedition, which led to the settlement of Bathurst, a few years later Lieutenant Oxley, R.N., reached the site of Wellington, and in 1821 Captain King explored part of Western Australia. Other investigators followed, including Captain Charles Sturt, who discovered the rivers Darling and Murray and penetrated to the centre of the continent. In 1840 Eyre made his way from Spencer Gulf to King George Sound by following the coast, and also explored part of the interior of what is now South Australia (1273). Leichardt, before meeting his death in an attempt to cross from east to west, covered 3,000 miles in fifteen months in Queensland, then part of New South Wales. John McDouall Stuart sought to traverse Australia from south

to north, and on his third attempt (1861-62) succeeded. Burke and Wills also crossed the continent, but both died of starvation on the return journey (1278).

THE EXPLORATION OF CANADA

Although Jacques Cartier (346), Sieur de Monts (346), and Samuel de Champlain (345) first blazed the trail of civilization in Canada, the hardy men of the fur-trading companies had much to do with the opening-up of North America. In 1789 Alexander Mackenzie (1555) made an expedition down the great river which now bears his name, and in 1792 the same Scotsman was the first white man to cross the Rocky Mountains, already sighted in 1743 by La Vérendrye. Simon Fraser discovered the Fraser River in 1806, and David Thompson spent four and a half years surveying the Columbia River. The development of the North-West was largely due to the Canadian Pacific Railway, in the building of which Lord Strathcona (185), who started life as a clerk in the service of the Hudson's Bay Company, played a leading part.

THE OPENING-UP OF AFRICA

For a time Africa, in very truth the Dark Continent, was the cynosure of travellers who sought to open to civilization the vast spaces of the unknown world. In this work James Bruce (93), ambitious in his early days at Harrow for nothing more hazardous than a cure of souls, was the British pioneer. The first of his many wanderings was a tour through Barbary. It was for the purpose of securing drawings of Roman ruins, the long neglected evidence of a mighty power that once dominated northern Africa. This was not accomplished without considerable danger that only served to whet his appetite for travel farther afield. Bruce went on to Syria, still sketching archaeological remains, and from thence to Egypt and Abyssinia. He discovered in 1770 the source of the Blue Nile, or rather rediscovered it, for a Jesuit named Pedro Paez had come across it in 1615, and in 1772 reached Sennaar, the capital of Nubia. With a strange irony not unknown in history, Bruce met his death, after wandering in beast-infested jungles and across trackless wastes, by falling down the stairs of his peaceful home in Scotland.

Mungo Park and the Source of the Niger

Prompted by that great encourager of scientific research, Sir Joseph Banks (1518), who had accompanied Cook on his first voyage to the South Seas, Mungo Park (1353) set out in 1795 to discover the source of the river Niger. Although he went through almost incredible

hardships, Park's efforts were not rewarded by success, and the pioneer returned to England. In 1805 he again left the homeland with the same object in view. But he never reached the haven of his desire, for having followed the trail of the Niger for nearly 1,000 miles, he and his band were attacked at Bussa, and in endeavouring to escape by jumping into the river the explorer was drowned.

The Landers and Clapperton

Success, however, attended the efforts of Richard Lander (1804-34) and his brother John (1807-39), sons of a Truro innkeeper, who in 1830 came across the outlet of the river in the Bight of Biafra. Previous to this the former had journeyed with Commander Hugh Clapperton (1788-1827) from Badagry, in the Bight of Benin, to Chungary, near Sokoto.

The Pygmy Tribes of Central Africa

In a series of amazing journeys (*map 266*) David Livingstone (261) discovered Lake Ngami and the river Zouga in 1849, the Victoria Falls in 1855 (265), and Lake Shirwa and Lake Nyasa in 1859. Other notable investigators had also been busy, including Richard Burton (177), John Hanning Speke (1017, 181-83), Sir Samuel Baker (513) and Sir Henry Morton Stanley (681, 268), who found Livingstone in 1871 after years had passed without any authentic news of him (683-85), relieved Emin Pasha (688), and traced the whole length of the river Congo, making a complete circuit of the equatorial belt of Africa (688). Paul du Chaillu (1526), a Frenchman, came across pygmy tribes in 1865, as did Georg Schweinfurth (1836-1925), a German botanist and archaeologist, who in a three years' journey (1868-71) discovered similar folk, thus confounding those who believed that the stories of their existence were of no greater credence than fairy lore.

THE DISCOVERY OF THE POLES

Mention has been made above of the many attempts to find a North-West and a North-East Passage, and a number of references will be found in the accompanying Table to various expeditions sent to the Polar regions, sometimes for specifically scientific purposes and not primarily for discovery. The list of names connected with the Arctic and Antarctic is long and honourable. If it does not include many who made such spectacular triumphs as did Robert Edwin Peary (1565), the discoverer of the North Pole in 1909, and Roald Amundsen (1101, 15), who reached the South Pole in 1911, none can be regarded as least in a glorious company.

Black figures denote pages where further information is given

Notable Years and Events in the History of Exploration

Nationality is indicated as follows:—*Brit.*, British; *Fr.*, French; *It.*, Italian; *Rus.*, Russian; *Am.*, American; *Sp.*, Spanish; *Port.*, Portuguese; *Gk.*, Greek; *Nor.*, Norwegian.

B.C.

500 ? Hanno, Carthaginian, discovers Sierra Leone, West Africa.

464 ?-447 ? Herodotus (484 ?-424 ? B.C.), Gk., visits the islands of the Aegean Sea, Asia Minor, Babylon, Tyre, Palestine and Egypt.

330 ? Pytheas, Gk., voyages from Massilia (Marseilles) to England, Scotland, and probably Norway, and explores Baltic coast.

329. Alexander the Great (355-323 B.C.), Gk., reaches the then farthest-known limits of Northern Asia.

325. Nearchus, Gk., sails from the Indus to the Tigris at the command of Alexander the Great.

A.D.

79. Hippalus voyages from the Red Sea to India.

870. Ottar (Ohthere), Nor., discovers the White Sea.

985 ? Erik the Red, Nor., discovers Greenland and explores the west coast.

1000 ? Leif Ericsson, Nor., discovers North America.

1160-73. Benjamin of Tudela, Sp., visits India.

1270. Lancelot Malocello, It., discovers the Canary Islands, off the north west coast of Africa.

1318 ? Friar Odoric of Pordenone (1286 ?-1331), It., starts on a journey to India, the Malay Archipelago, China and Tibet.

1325-53. Ibn Batûta (1304-77), Arab traveller, visits Syria, Medina, Mecca, Persia, Aden, Mombasa, Ormuz, Arabia, Calicut, Ceylon, China and Central Africa.

1445. João Fernandez, Port., explores the Sahara from the Rio d'Ouro.

1466. Cadamosto, Alvise (1432-77), It., discovers the Cape Verde Islands, in the Atlantic.

1462. Pedro de Cintra, Port., rediscovers Sierra Leone, West Africa.

1471. Fernando Po, Port., discovers the island of that name in the Bight of Biafra, West Africa.

1484. Diogo Cão (fl. 1480-86), Port., discovers the mouth of the Congo, equatorial Africa.

1486. Bartholomew Diaz (d. 1500), Port., rounds the Cape of Good Hope.

1490. Pero de Covilhão (fl. 1487-1525), Port., travels in Abyssinia.

1492. Christopher Columbus (1446 ?-1506), It., reaches the New World.

1497. John Cabot (1448 ?-98), naturalized Venetian in the service of Henry VII of England, rediscovers Nova Scotia, Newfoundland and Florida, 1525.

1497. Vasco da Gama (1460 ?-1524), Port., discovers the sea route to India via the Cape of Good Hope, 1539.

1498. Vasco da Gama (1460 ?-1524), Port., reaches Calicut, on the west coast of India, 1539.

1500. Pedro Alvarez Cabral (1460 ?-1526), Port., traces the coast of Brazil.

1500. Vicente Yañez Pinzon (1460 ?-1524 ?), Port., reaches the mouth of the Amazon, South America.

A.D.

1512 ? Juan Ponce de Leon (1460 ?-1521), Sp., makes first exploration of the coast of Florida.

1513. Vasco Nuñez de Balboa (1475 ?-1517), Sp., leads the first European company to the Pacific, 1518.

1516. Juan Diaz de Solis (1460 ?-1516), Sp., discovers the mouth of the Rio de la Plata, South America.

1520. Ferdinand Magellan (1470 ?-1521), Port., discovers the Strait of Magellan and reaches the Pacific Ocean, 1435; after his death Sebastian del Cano (1460 ?-1526), Sp., carried on the expedition, crossed the Indian Ocean, doubled the Cape of Good Hope, and completed the first circumnavigation of the globe (1522), 1442.

1526-30. Sebastian Cabot (1474-1557), Anglo-Venetian, explores the rivers La Plata, Parana and Paraguay, South America, 1525.

1527. John Rut, Brit., attempts to find a North-West Passage to China.

1535. Marshall Islands, in the North Pacific Ocean, discovered.

1535. Jacques Cartier (1494-1557), Fr., discovers the island of Anticosti, in the St. Lawrence, and reaches Hochelaga (Montreal), 1526.

1541. Francisco de Orellana (1500 ?-50), Sp., discovers the course of the Amazon, South America, 1562.

1542 ? Discovery of Japan by the Portuguese.

1553. Richard Chancellor (d. 1536), Brit., reaches Archangel, in the White Sea, and makes his way overland to Moscow, 1527.

1558. Anthony Jenkinson (d. 1611), Brit., starts first English trade with Central Asia via the Caspian Sea.

1567. Solomon Islands, in the Pacific Ocean, discovered.

1576. Martin Frobisher (1535 ?-94), first Englishman to attempt the North-West Passage, discovers Frobisher Bay, in Arctic America, 1539.

1577-80. Sir Francis Drake (1539 ?-96), first Englishman to see the Pacific and to sail round the world, 961.

1579. Thomas Stephens (1549-1619), reaches India: the first Englishman to do so.

1583. Ralph Fitch (1550 ?-1611), John Newberry, William Leades, and James Story, Brit., go to India by the overland route.

1587. John Davis (or Davys) (1550 ?-1605), Brit., discovers Davis Strait, between Greenland and Baffin Island, 1531.

1596. Willem Barents (d. 1597), Dutch, rounds Nova Zembla, in the Arctic Ocean, discovers Spitzbergen; Barents Sea, between these places, is named after him.

1603. Samuel de Champlain (1567-1635), Fr., sails up the St. Lawrence, North America, 845.

Black figures denote pages where further information is given

A D

1606. Luis de Torres, Sp, sails through Torres Strait, between Cape York Peninsula, Australia, and the island of New Guinea.
1606. Pedro Fernandez Quiros, Port, discovers the New Hebrides, in the Pacific.
1610. Henry Hudson (d. 1611), Brit, discovers Hudson Bay, North America, 933.
1616. Dirk Hartog Dutch, on the coast of Australia.
1616. William Baffin (1754-1822), Brit, discovers Baffin's Bay, dividing Greenland from the eastern shores of North America, 1518.
1616. Jaspas Bouatto, Port, makes his way from the Central Zambezi to the east coast of Mikindani, on the Indian Ocean.
1616. Jacob Le Maire, Dutch, and Willem Schouten, Dutch, discover Cape Horn, the most southerly point of South America.
- 1620-21. Richard Jobson (d. 1620-23), Brit, ascends the river Gambia, in West Africa, as far as Tenda.
1642. Abel Janszoon Tasman (1603?-59), Dutch, discovers Tasmania and New Zealand, 1579.
1643. Tasman (*see above*) discovers the Friendly (Tonga) Islands, South Pacific, 1579.
1644. Tasman (*see above*) explores part of the coast of Australia, 1579.
1659. Pierre Esprit, Sieur de Radisson, Fr, and the Sieur de Groseillers (1621-84?), Fr, reach the prairies of the Far West of North America.
- 1678-82. René Robert Cavelier, Sieur de La Salle (1643-87), Fr, descends the Mississippi to the Gulf of Mexico, 1551.
1699. William Dampier (1652-1715) makes the first English exploration of the Australian coast, which he had visited in 1688, 1531.
1722. Jacob Roggwein, Dutch, discovers Easter Island, in the Pacific.
- 1740-41. Vitus Bering (1680-1741), Dane, explores the Aleutian Islands, Alaska, 1520.
1741. Vitus Bering (*see above*) discovers Bering Strait, connecting the North Pacific with the Arctic Ocean, 1520.
1742. Christopher Middleton (d. 1770), Brit., discovers Wager River and Repulse Bay, North America.
1767. Samuel Wallis (1728-93), Brit., discovers Tahiti and other Pacific islands.
1767. Philip Carteret (d. 1796), Brit., discovers Charlotte, Gloucester, Pitcairn and other Pacific islands.
1768. Louis Antoine de Bougainville (1729-1811), Fr., discovers Samoa, in the Pacific.
1769. James Cook (1728-79), Brit, makes first voyage round New Zealand and discovers the Society Islands and Oheeroa, in the South Pacific, 849.
- 1770-72. James Bruce (1730-94), Brit., journeys in Egypt and Abyssinia, and discovers the source of the Blue Nile, the chief tributary of the Nile, 97.
1771. Laskhoff, Rus., discovers the New Siberia Islands, off the north coast of Siberia.
- 1772-5. James Cook (1728-79), Brit., makes the first circumnavigation of the globe eastwards, 849.
1773. James Cook (*see above*) crosses the Antarctic Circle, 849.
1774. James Cook (*see above*) discovers the Sandwich Islands (Hawaii) group, in the Pacific, 849.
1778. James Cook (*see above*) discovers Inarui, 849.

A D

1789. Alexander Mackenzie (1755-1820), Brit., discovers the mouth of the Mackenzie River, North America.
1793. William George Browne (1768-1813), Brit., crosses the Libyan Desert, part of the Sahara, from Asut to Darfur.
1796. Mungo Park (1771-1806?), Brit., determines the course of the River Niger, 1356.
1798. Matthew Flinders (1774-1814), Brit., and George Bass (d. 1812?), Brit., prove Tasmania to be an island, 1538.
- 1818-24. René Caille (1799-1838), Fr., explores Senegambia and reaches Timbuktu, French Sudan.
- 1818-27. John Franklin (1786-1847), Brit, surveys much of the Arctic American coast line, 597.
1818. John Ross (1777-1836), Brit, rediscovers Baffin's Bay, 1570.
- 1819-20. William Edward Parry (1790-1853), Brit., navigates Barrow Strait, Arctic North America, 1564.
1827. William Edward Parry (*see above*) attempts to sledge to the North Pole and reaches latitude 81° 31', 1564.
1839. Edward John Eyre (1815-1901), Brit., discovers Lake Torrens, 1270.
1841. Edward John Eyre (*see above*) proves the possibility of an overland route between South and Western Australia, 1272.
1852. Joseph René Bellot (1826-53), Fr., discovers Bellot Strait, in the Arctic.
1854. John Rae (1813-93), Brit, proves King William Land, in Arctic North America, to be an island, 1569.
- 1860-61. Robert O'Hara Burke (1820-61), Brit., and William John Wills (1834-61), Brit, cross Australia from south to north, the first white men to do so, 1275.
1870. James Frederic Elton (1840-77), Brit., explores the Lampopo, East Africa.
- 1872-75. George Strong Nares (1831-1915), Brit, commands *Challenger* Arctic Expedition, 1560.
1874. Julius Payer (b. 1842), Austrian, names and partly explores Franz Josef Land, in the Arctic Ocean.
1874. Ernest Giles (1839-97), Brit., explores from Fowler's Bay to Perth, Australia, 1541.
1882. Joseph Thomson (1858-94), Brit., discovers Lake Baringo and Mount Elgon, East Africa.
1888. Fridtjof Nansen (b. 1861), Nor., accomplishes the first crossing of Greenland, 1560.
1897. Salomon August Andrée (1854-97?), Swedish, attempts to reach the North Pole by balloon, 1515.
1902. Robert Falcon Scott (1868-1912), Brit., discovers King Edward VII Land and Mt. Markham, Antarctica, 9.
- 1908-10. Jean Baptiste Charcot (b. 1867), Fr., maps Graham Land, etc., Antarctica, 1527.
1909. Robert Edwin Peary (1856-1920), Am., reaches the North Pole, 1565.
1911. Roald Amundsen (b. 1872), Nor., reaches the South Pole, 1101, 15.
1925. Roald Amundsen (*see above*) makes an unsuccessful attempt to reach the North Pole by aeroplane.

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SIXTY CENTURIES OF TRADING

Commerce as a Factor in Shaping the Destiny of Nations

FEW factors have been so potent in shaping the destiny of nations as commerce. The desire of peoples to extend their sphere of trade has ever been the primary influence that led them not only to penetrate peacefully into untrodden lands, where unsuspected dangers awaited them, but also to take up arms against their fellow men. Inter-tribal and international conflicts can almost invariably be traced to this desire for trade expansion.

Danger and discomfort have proved to be incentives. With the object of discovering new avenues for the prosecution of trade, or to obtain furs, minerals, timber, and other products necessary to the life of the world, men have ventured fearlessly into the heart of the frozen north, into the burning lands of the tropics and into the trackless forest regions (1606).

It is impossible to say exactly when trade began, that is, when the earliest exchange of articles between men occurred. We know, however, that trade has been going on in the world for upwards of sixty centuries, for there is evidence that the Assyrians, the Babylonians, and the Egyptians were freely resorting to the exchange of commodities some 4,000 years before the Christian era.

To day, when we desire to become possessed of certain goods, we regard the transaction in terms of coinage, and in making the purchase we hand to the tradesman the sum at which he has priced his wares. The purchase constitutes an act of trading. But how, before the introduction of metal coins or paper currency, did men pay for the commodities they required?

BUYING AND SELLING BY BARTER

The most primitive form of trading was barter. Ever since the inhabited world began, certain things have been possessed by one person that have been needed by another. In order to secure what was the property of another it was necessary to make an exchange the equivalent in value to the article desired. That was the peaceable manner of striking a bargain. The first man, therefore, who gave one article in exchange for another was the pioneer trader—the first merchant.

This manner of bargaining, satisfactory though it may then have been, was crude and inconvenient. Before a desirable exchange could be effected, the owner of the required commodity had first to be discovered and then the making of accept in exchange any of such articles.

These, moreover, were the difficulties that lay in the way of the party possessed. These, moreover, were the difficulties that lay in the way of the party desiring. These, moreover, were the difficulties that lay in the way of the party desiring.

development of civilization, to the establishment of a common means of measuring wealth, and what is known as money came to be more or less generally used.

Beads and Dates as Money

To-day we are apt to think of money only as metal pieces or paper notes, but a glance at the derivation of the Latin word for "money" shows a very different state of things. The root of the word *pecunia* is *pecus*, which means "head of cattle," and it was with cattle that the early Romans and contemporary peoples measured their wealth. Long before metals were utilized for money, beads, shells, rice, ivory, dates, and an endless variety of other products were brought into requisition. In fact, some of these, especially shells, are even now in certain parts of the world accepted by the natives in payment for their wares. This manner of exchange is mentioned by Homer in the *Iliad*, and is thus translated by Pope.

For Diomed's brass arms of mean device,
For which nine oxen paid a vulgar price,
He gave his own of gold divinely wrought
An hundred beeves the shining purchase bought.

When Coins were of Iron

With greater enlightenment came the need for a simpler and more convenient means of exchange, and metal began to take the place of the shells and other articles that were employed. Originally iron was made use of—the ancient Spartans had iron coins—but on account of its bulk in relation to its value it was superseded by gold and silver.

Money has played an important part in the development of trade, but money alone could not have effected the enormous development that has been made since the earliest trader struck his first bargain. Trade would have remained but a series of domestic or inter-tribal transactions—international commerce could not have arisen, had money been the sole influence in its development.

Trade-routes, both overland and sea, improved methods of manufacture, the application of steam to industry and to transport facilities, electricity, the overland and under-sea telegraph, the telephone—these are some of the powerful and varying influences that have affected the progress of trade. And of these the trade-routes were perhaps the most potent factor.

Commercial transactions were taking place in the days of early man all over the world in the primitive form of domestic interchange of

wares, but trade in the true sense of the term began in the East. Gradually it filtered through to the West, but without trade-routes it could never have made its way into Europe.

The Chinese as Pioneers

The Chinese were probably the earliest to embark on a more or less organized scheme of trading. Records exist of Chinese craftsmen dyeing fabrics, making wooden wares, fashioning pottery, and shaping metal ornaments as early as the 27th century B.C. Towards the end of that century the wife of the Emperor Hwangti established the industry of silk culture and was given a place among the Chinese deities as the "goddess of silkworms."

The silk industry, jealously guarded by the Chinese—it was 3,000 years before its secret was discovered by the Japanese—attained amazing proportions, and soon beautiful silken fabrics were being made in many parts of the Chinese dominions. But it was many years before silken goods were allowed to pass into foreign countries, although other products were being transported by the rough and dangerous overland routes into India and Persia.

China's Early Commercial Travellers

It can only be conjectured how the very earliest Chinese traders found their way into neighbouring lands, for no records earlier than the 15th century B.C. have come down to us. At that period, we are told, Chinese merchants were making periodical journeys to Khotan, in Eastern Turkestan, probably following the course of the Di-chu, a headstream of the Yangtze-kiang, after crossing the Yun-ling mountains, and then making their way through one of the rugged passes of the Alten Tagh, a northern bulwark of the Kuen-lun system.

Overland Routes of Long Ago

A few centuries later we find them developing commercial relations with northern India, taking their goods laboriously from Sze-chwan to Patna, on the river Ganges. They traversed the mountain fastnesses of Tibet, and followed the Brahmaputra for some 400 miles, leaving it where it bends to the south. Their path continued to be a westerly one, and once they struck the Ganges, the principal watercourse of India, their journey's end was almost in sight.

Other routes were gradually opened up, and in the 3rd century B.C. the Chinese trader appeared in Burma, his journey thither being beset by far fewer difficulties than those to other regions into which he had penetrated earlier. These were some of the very earliest land routes for trade from one country to another of which there is evidence.

The East Penetrates the West

As trading increased an outlet for the interchange of goods was sought in more distant countries, and eventually the East connected with the West. The merchants of the East found various entrances into Europe, the northernmost being across the Ural mountains into Russia. To accomplish this the pack-camels and caravans were compelled to make their way across hundreds of miles of inhospitable steppe—a vast unforested plain—before obtaining egress through the passes of the natural dividing-line between Asia and Europe.

Coming from India, they passed along the southern base of the Hindu Kush, a western prolongation of the lofty Himalayas, and skirted the southern shore of the Caspian Sea to the north-west of Persia, where one road led south to the ancient cities of Babylon and Nineveh, and another to the north-west and south-west, the former branch terminating at Trebizond, on the Pontus Euxinus (the modern Black Sea), and the latter at Issus, an ancient Cilician seaport on the north-east shore of the Mediterranean Sea. Branch routes of that which served Babylon diverged westward to the Phœnician coast and north-westward to Constantinople, on the Bosphorus. From Constantinople the way led by a natural road to the river Danube, via Adrianople, Philippopolis, Sofia, Nish, and Belgrade, whence access to most other parts of western Europe was comparatively easy.

These, then, were the main channels by which the merchants of the East dispatched their wares to the western half of the Old World. But even while the earliest overland trade routes were being sought, merchandise was being carried from port to port by water.

THE FIRST OVERSEAS TRADERS

There exist in varying forms indications of the industry of the Chinese, of the travels of the southern Arabs with the goods they had for disposal, and of the riches that were accumulated by India. Not, however, until the time when that ancient and remarkable people, the Phœnicians (1600), migrated from their traditional home on the Persian Gulf to the eastern shore of the Mediterranean Sea do we find any connected and reliable story of a serious effort at organized trade.

In their new surroundings the Phœnicians developed a curiously un-Semitic love of the sea. They were the first notable navigators, the first notable carriers of goods upon the seas. From their ports of Tyre and Sidon they navigated their vessels to distant lands, on whose shores they established settlements,

Black figures denote pages where further information is given

wherever there were facilities for landing their cargoes and the likelihood of marketing them. They were as skilful in industry and art as they were in trading, and they distributed their own purple-dyed fabrics, metal and glass work, and other products as well as the merchandise of other countries. Among their many trading posts was Carthage, which eventually became the most important of their cities (1607).

But not only on the waters did this ancient Semitic race successfully exploit their trade. They journeyed inland with their wares, and established trading relations with the adjoining territories. At stated seasons Phœnician merchants would leave Tyre with fully laden caravans for some far-off region, where they hoped, even if they did not expect, to effect an exchange of products. For upwards of 3,000 years—for a far greater length of time than any other people—the Phœnicians maintained their trading associations with their neighbours and distant races, ever held in the highest esteem and earning everywhere a name for integrity in all their dealings.

After withstanding several sieges, including one of thirteen years' duration, Tyre was eventually overcome and destroyed by Alexander the Great in 332 B.C. From that time the commercial prosperity of the Phœnicians declined rapidly. In spite of a temporary recovery this first great nation of merchants never regained its former prosperity, and when in the 7th century A.D. Carthage fell into the hands of the Saracens it had ceased to be the world's mart, and other channels of trade had enabled its competitors to outstrip it.

ROME'S FATAL TRADE POLICY

The policy of the great empires of antiquity toward seats of trade beyond their borders was unsympathetic and short-sighted. When a distant trade centre became prosperous it was regarded with disfavour and must either be brought under the rule of the empire or else destroyed. In a single year (146 B.C.) the Romans utterly destroyed Carthage and the important Greek seaport, Corinth, and in 86 B.C. they stormed Athens and stripped her of her commerce. No less rigorous was their treatment of the great inland centre of Syrian trade, Palmyra, the Tadmor of the Bible. In this splendid city industry was almost entirely subordinated to trade. While the artisans groaned under an exacting fiscal system, the trading community drew enormous profits from organizing and conducting rich caravans of silks, jewels, perfumes, and other Eastern luxuries along the trade route from the Persian Gulf through the Syro-Arabian desert. The risks from hostile tribes were formidable,

and the merchant who safely convoyed a caravan along this dangerous route was often rewarded by a public monument. The most important streets in Palmyra were lined with pillars, and these were decorated with statues of successful traders. For centuries Palmyra was a centre of trade intercourse between East and West, and its destruction by the Emperor Aurelian (1517) in A.D. 272 left Palestine commercially isolated. Such was the trade policy that Rome persistently pursued, and to this practice may perhaps in part be attributed the decline and ultimate fall of the Roman empire.

VENICE AS THE WORLD'S TRADE CENTRE

After the Phœnicians the next great trading power was Venice. It is true that Greece was a commercial state, with such important trading centres as Miletus, Ægina, Syracuse, Corinth, Rhodes, and Athens, and that she owed her wealth almost wholly to trade. But the crowning glories of Greece were her literature and her arts. Energetic and resourceful though the Greek merchants were, they lacked the starkly adventurous and enterprising spirit of the Phœnicians, with whom to hear the merest rumour of treasure lying in a distant land was to set forth and win it. To the Phœnicians dangers, doubts, and difficulties only increased the zest. With the Venetians, as with the Phœnicians, commerce was the most powerful, the all-excluding interest. Through trade Venice became the capital of a mighty republic and eventually mistress of the commerce of the known world.

Venice Wedded to the Sea

In the 5th century A.D., when the barbarian hordes began to enter northern Italy, dwellers in the cities along the north-west corner of the Adriatic Sea sought shelter from the invaders among the hardy fisher-folk inhabiting the low mud islets off the shore. At first many of the refugees would return to the mainland when the immediate danger was past, but in 568, when Alboin, King of the Lombards, with his whole tribe and a vast host of other barbarians, swept over the great Venetian plain, the visitors from the mainland decided to settle permanently in the lagoons. Here, in the sea, the foundations of Venice were laid.

The fortunes of this little community of fishermen and exiles were, like its dwellings, founded on the sea. Under able government its trade prospered, and when in the year 1000 the Doge Pietro Orseolo II (died 1009) crushed the Dalmatian pirates in their citadel, he not only freed Venice from a pressing danger but placed her in a position to become mistress of the Adriatic. Every year down to 1789, on

Ascension Day, the day on which Orseolo had set out upon his expedition, a solemn procession of boats put out into the Adriatic, and gratitude for the victory was celebrated in due religious form. In 1177 this ceremony developed into the so-called "marriage of the sea," a rite which clearly symbolized the maritime dominion of Venice. From his sumptuous state barge—the Bucentaur ("gilded bark") of later times—the doge flung a consecrated ring into the water, declaring with the words, "We wed thee, sea," that Venice and the sea, upon which she lived and traded and from which she drew her power, were indissolubly joined.

Reaping Profit from the Crusades

In return for various services to the Eastern Empire Venice gained many important trading privileges. A special quarter was allotted to her in Constantinople, besides warehouses in the Syrian ports. Her supremacy in the Adriatic enabled her to reap large profits from the first three Crusades, for which she supplied both transport and provisions. The merchants of the lagoons fitted out a fleet for the Fourth Crusade, and when the leaders of that expedition, instead of sailing to the Holy Land, were induced to turn their arms against Constantinople, Venice received a large share of the spoils. She now commanded the trade route from Asia Minor and that between Constantinople and Western Europe. She was mistress not only of the Adriatic but also of the Levant.

This increasing prosperity brought Venice into collision with Genoa, and for nearly a century these two powerful maritime states fought for the monopoly of the Levant trade. At length, in 1380, the Genoese admiral, Luciano Doria, resolved to starve Venice into surrender, but he had reckoned without the naval genius of the aged Vettor Pisani. Instead of blockading Venice Doria found that he was himself blockaded in Chioggia, and after a siege of many months the Genoese fleet was forced to surrender. From this conflict Venice emerged undisputed mistress of the Mediterranean.

The First Public Bank

In the fifteenth century Venice reached the height of her power. She was the exchange mart of Europe and the centre of its carrying trade. Venetian merchants had long been regular visitors at the fairs, and had firmly entrenched themselves in all the important business centres. Finance became a science at the Rialto, the famous exchange of Venice, where the first public bank was founded and the first bills of exchange were negotiated. A regular cycle of overseas trade had been set up. Venetian ships would carry sugar to London, where

the cargo was exchanged for wool, which would be shipped to Flanders and there exchanged for cloth. The Flemish cloth would then be distributed at the various ports along the route to the Levant, where the ships were again loaded with Eastern wares ready for the return journey. Every year Venice sent out as many as six trading fleets, each consisting of about 500 vessels, and, that the rising generation might become worthy merchants of Venice, each galleass that left the lagoons carried certain young noblemen, for whom the voyage provided practical experience in navigation and commerce.

Industries of Venice

Nor was Venice backward in industries. The palaces and mansions of Europe glittered with mirrors, drinking cups, and ornamental vessels made in the glass works of Murano. Even such famous silk-weaving centres as Florence and Genoa were outstripped by Venice in the production of stuffs of amazing richness and variety. Over and above the fabrics that she herself produced, Venice imported immense quantities of costly textiles from the East, not only for export westward, but also for her own delectation. On gala occasions the lagoons presented a scene of extraordinary splendour, the houses and bridges and even the boats being decked with richly patterned and coloured silken fabrics and priceless oriental carpets.

Already in the early years of the fifteenth century a warning note had been heard. On his deathbed the Doge Tommaso Mocenigo (1343-1423), after reviewing with pride the progress and secure financial position that Venice had attained during his tenure of office, addressed these words to the senators assembled in his chamber:

If you continue in this way you will multiply more and more, and will become masters both of all wealth and all Christendom. Everyone will fear you. But I beseech you, avoid, as you would fire, seizing what belongs to others and engaging in unjust wars, for in such wars God will not support princes.

Doge Mocenigo had spoken truly. To ensure her food supply and a free outlet for her merchandise, Venice had been forced to acquire territory on the mainland. This expansion, which had been proceeding since the beginning of the fifteenth century, aroused the jealousy of the other Italian states, involved Venice in a series of costly wars, and ultimately, in 1508, resulted in the formation of the League of Cambrai for her dismemberment.

Why Venice Lost her Position

In another direction Venice had suffered severely. The capture of Constantinople by the Ottoman Turks in 1453 struck a terrible

blow at her Levant trade. But the partial crippling of her Eastern trade and the struggles arising out of her encroachments on the mainland were as nothing to the shock she was soon to receive. The merchant princes of Venice had shown little more than a mild interest in the exploits of Columbus; they were aghast at the success achieved by Vasco da Gama. In the discovery of the New World they had seen little to disturb them. Had they not still their Eastern trade, harassed though it might be by Turks, Moors, and Algerines? But when Vasco da Gama (1539), after rounding the Cape of Good Hope, reached Calicut and brought back a cargo of spices to Lisbon, they knew that their doom was sealed. The discovery of the Cape route to India deprived Venice of her monopoly of oriental trade and was the death-blow to Venetian commercial supremacy.

When Might Was Right

While commerce had been progressing in the Mediterranean area, traders had not been idle beyond the Alps. The feudal system, admirably adapted though it might have been to the political and social exigencies of the times, was not favourable to trade, but difficulties called out qualities essential for successful commerce. At a time when might was right—when robber knights held sway on land and pirates on the sea—commerce sought to regulate and protect itself. As the towns of the Empire grew in numbers and strength they were moved to unite in defence of common interests, and the opposition of the territorial princes to the increasing power of the towns only served to accentuate this tendency. In this vigorous commercial development the German merchants were foremost.

GERMAN TRADING OUTPOSTS

Although it is difficult to say exactly when the Hanseatic League was formed, as early as 1241 we find the towns of Lübeck and Hamburg joining hands to safeguard the important highway between the North Sea and the Baltic against the depredations of robber knights. Bremen, Cologne, Frankfurt, Danzig, Königsberg, Riga, and other towns followed suit, and in its prime this powerful commercial confederation numbered some 70 or 80 towns among its members. Sweden, Denmark, Flanders, the islands of the Baltic, England—all knew these enterprising German merchants, who planted trading outposts in most of the countries of Europe. In whatever town they settled they lived in their own quarter behind stout walls, and they were generally strong enough to secure special privileges and were so enabled to snap their fingers at the local laws.

The Hanse Merchants in England

In England the Hanse merchants had powerful influence in many of the ports. In London they established themselves in the middle of the thirteenth century at the Steelyard, above London Bridge. Cologne merchants had settled in London in the eleventh century, and this early colony formed the nucleus of the later "counter" (*Kontor*). Richard Cœur de Lion had granted his "beloved burghers of Cologne" important privileges, perhaps in part payment of the sum borrowed for his ransom, and subsequent English sovereigns continued the Germans in their privileges for value received.

Germans Expelled by Queen Elizabeth

However useful it might be to the sovereigns, the citizens of London resented the presence of this wealthy and aggressive German colony in their midst, whose members obeyed the English laws only so far as these suited their own purposes. To Londoners these foreign-looking buildings and the massive walls that enclosed them were an eyesore and an offence, and in times of popular disturbance the Steelyard was always a favourite object of attack. The early trade of London, however, owed much to the enterprise of the German merchants, who maintained their footing in the City until they were expelled by Queen Elizabeth (1316) in 1597.

Activities of the Hanseatic League

There was no limit to the commodities in which the League traded. Herrings from the Baltic; fruits from southern Europe; wines from Spain; wax and tallow, leather and skins from Russia; cloths from Flanders; woollens from England; dyed fabrics from south Germany; costly oriental wares from Venice—all furnished a profit for the hard-headed German merchants. Gradually the League succeeded in gathering into its hands the bulk of the trade of the lands bordering the Baltic, and, like Venice, established an ordered cycle of trade in raw products and manufactured goods. Its banking activities, too, were widespread and important, and very few of the sovereigns of Europe but were acquainted with Hanseatic gold.

Faded Hanseatic Glories

After centuries of well-nigh unqualified success the League began to decline. As early as 1425 it had lost a source of great profit, for in that year the herrings left the Baltic and migrated to the Dutch coast. This loss, however, it made good in other directions. But, with a conservatism bred of its almost despotic power,

the League failed to keep pace with the changing conditions of the times. The nations of the north, which had at first been subservient, were gaining in power and self-confidence and were becoming dangerous rivals. Moreover, the territorial princes were growing strong enough to control their mercantile interests themselves, and geographical discoveries were opening up new trade routes. Dissensions arose in the council of the League. The members resented the autocratic control of Lübeck. The towns grew rebellious, and, one by one, broke away; the outposts were either lost or fell in prestige. The League lingered on, weakened and impoverished. Its last general assembly was held in 1689. After that date little remained of former Hanseatic glories save some beautiful buildings in various parts of Europe and certain privileges enjoyed by the free cities of Lübeck, Hamburg, and Bremen.

Fairs as Centres of Commerce

In common with the Venetians and other enterprising traders, the Hanse merchants were diligent in attending fairs, which in early times, when communication was difficult and travelling dangerous, were valuable centres of commerce. At the Russian fair of Nijni-Novgorod, indeed, the Germans were not merely visitors but permanent residents, and there, as in their London "counter," they provoked resentment by their independent and aggressive attitude.

In the olden world public gatherings of any kind were welcomed as opportunities for trade, and many of the fairs originated in religious festivals, when vast numbers of people met periodically at a particular locality. Rulers recognized the importance of these gatherings, and often relaxed the laws for the time being to induce traders to visit fairs. In the fourteenth century the Emperor Charles IV exempted merchants from imperial taxation and from civil process during the fair of Frankfort-on-Main.

Some Famous Fairs

Famous among French fairs were those of Beaucaire, Troyes, and Champagne and Brie. Besides Bartholomew fair at Smithfield and the fairs of Winchester and Westminster, perhaps the most typical, and by far the most important of English fairs was Stourbridge fair, near Cambridge, the earliest known charter for which dates from the beginning of the thirteenth century, and which did not come to an end until 1855. At this fair English traders were jostled by merchants from every part of Europe, and side by side with the products of England might be seen the sword-blades of Toledo,

the silks of Italy and France, oriental wares from Venice, fabrics from Flanders, and furs and amber from the north.

The Fair of Nijni-Novgorod

The greatest of European fairs and the only one which still keeps its old importance is the fair of Nijni-Novgorod. For centuries Nijni-Novgorod, which stands at the junction of the Volga and the Oka, has been an important mart for Siberian caravans, and, despite the Trans-Siberian railway, these two mighty rivers remain the most advantageous means of communication. The fair buildings are permanent, many being solid stone structures. A special quarter is devoted to each class of goods. Every summer for six weeks on end trade draws to this remote spot merchants of every colour and creed. With changing conditions of trading most of the fairs of Europe have either been discontinued or have altered in character, but in eastern Russia business methods are much the same now as they were in the palmy days of the Hanseatic League, and this famous fair still holds its ground.

OPENING THE OCEAN HIGHWAYS

The discovery of America (765) and of the sea route to India entirely altered the trend of trade. Whereas commerce had before faced eastwards it now faced to the west. The Mediterranean, so long the favoured medium of world trade, gave place to the Atlantic, and the waves of the Atlantic beat against the coasts of western Europe. On the Atlantic seaboard new ports sprang into being and old ones took on a new importance, and these western ports became the outlets of fresh trade and also of further exploration.

The New Route to India

Portugal was the first nation to take advantage of the new route to India. Lisbon quickly became an important commercial centre, and within fifty years of Vasco da Gama's discovery Portugal had obtained command of the Eastern trade. But various causes conspired to put an end to this brilliant though short-lived commercial ascendancy. Portugal's colonial system was faulty and expensive; her extreme concentration on the African slave trade resulted in the neglect of agriculture and manufactures; her persecution of the Jews led many of that race of financiers to employ their talents within the borders of her industrious rival, Holland; and her commercial policy was frankly suicidal. She was more intent on securing actual money than on a healthy interchange of commodities, and the cargoes that her own ships brought from the East were transferred at Lisbon to Dutch,

English, or Italian vessels and unloaded in one or other of the ports near the markets of central Europe. Thus Portugal acquired money, which she squandered, and at the same time neglected to set up productive industries.

Why Portugal and Spain Declined

In the use that she made of the opportunities to her hand Spain was no wiser than Portugal, and she declined almost as rapidly. Commanding the gold and silver mines of Mexico and Peru, in her lust for the precious metals she allowed her home industries to fall into decay. The spoils of the treasure-house of the New World were used by Spain in buying ready-made commodities instead of in fostering her own manufactures, and the hope of quickly gained wealth drained the country of population and produced a distaste for honest toil.

Dutch Profits and Losses

Meanwhile the Dutch had profited by the new discoveries. During the sixteenth century and part of the seventeenth the Netherlands were the centre of maritime traffic in Europe. The supineness of Portugal had turned Antwerp into the general storehouse and chief distributing centre of the world, and Philip II (1566), when he forbade the Dutch to trade with the Peninsula, laid the foundations of their sea supremacy and their colonial empire by forcing them to trade direct with the Indies. In the seventeenth century they began to decline through the competition of powerful rivals, of whom England was not the least considerable.

ENGLAND'S STRUGGLE FOR SUPREMACY

Although at first handicapped by her isolated position, England had been long advancing as a commercial nation. Towards the close of Edward III's reign we find in the Pole family of Hull the first representatives of that long line of merchant princes for which England later became famous, and which includes such names as Sir John Philpot (died 1384), Sir William Walworth (died 1385), Richard Whittington (died 1423) (1589), William Canynge of Bristol (died 1474), and Sir Thomas Gresham (1519-79). Under Edward III, too, Flemish weavers had settled in the island, and from them the English learned the art of turning their famous wool-fleeces into fabric. But it was not until the age of Elizabeth that England fairly started on that career of maritime progress that was to make her the chief carrier of merchandise upon the seas.

Reigning as he did in the age of the great Spanish and Portuguese navigators, Henry VII (1545) had encouraged the costly and precarious work of discovery. Henry VIII (1545) pur-

sued a safer policy and fostered trade in the already established channels. As yet, however, English merchants generally used foreign ships, and the trade of England was, for the most part, carried on by those very Hanse merchants whose presence in the heart of London so incensed the citizens.

LONDON: COMMERCIAL CENTRE OF THE WORLD

In the reign of Elizabeth (1516) the English seaman came into his own. The great queen granted bounties to Englishmen for building English ships, drove the German traders out of London, and spurred England to win naval and commercial supremacy. Her reign witnessed the rising fortunes of many of those great companies which had so marked an effect on trade and colonization. To the Russia Company (1614), for instance, England owed her first commercial intercourse with a country then almost unknown. The Turkey or Levant Company traded with Constantinople and the Near East until 1825. The East India Company, chartered by Elizabeth in 1600 as "The Company of Merchants of London Trading to the East Indies," eventually became the Indian Empire. "When Queen Elizabeth ascended the throne," wrote Sir Walter Besant, "the commercial centre of the world was Antwerp; when she died the commercial centre of the world was London."

Sir Thomas Gresham

Of all England's merchant princes the greatest perhaps is Sir Thomas Gresham (1542), the founder of the Royal Exchange and of Gresham College, London. "Having been bound 'prentice eight years to come by the experience and knowledge that I have," Gresham spent twenty years in Antwerp applying himself to his business of merchant-adventurer and acting as financial agent to the Crown. That he was a man of infinite resource, if not always over-scrupulous in his methods, is evident. The story is told that he conveyed £50,000 in bulky Spanish silver reals out of the Netherlands into England packed in great vats, which he caused to be labelled "one hundred demi-lances' harness." His appreciation of the high standing of his profession, coupled with his first-hand knowledge of foreign trade centres, led him to propose that the merchants of London should be suitably housed instead of "walking in the rain when it raineth, more like pedlars than merchants," and the dignity of commerce is finely expressed in the splendid panel by Frank Brangwyn (1524) in the Exchange that Gresham founded. In a time of great difficulty Gresham succeeded in building up England's credit.

Merchant Princes of the Middle Ages

The merchant princes of the Middle Ages, absorbed though they were in their great game of commerce, carried their heads high. In the National Gallery of Berlin there is a picture which shows Anton Fugger (1493-1560), the rich merchant and banker of Augsburg, burning an imperial bond for money due to him before the astonished eyes of Charles V (1527). It is also related of Richard Whittington (1589) and of the Scottish goldsmith, George Heriot (1563-1624), the "Jingling Geordie" of Sir Walter Scott's "Fortunes of Nigel," that they burned bonds issued by their sovereigns.

The Whittington of Legend and Fact

During his last mayoralty, when Whittington was entertaining Henry V (1545) at the Guildhall, the guest-chamber—so the story goes—was pervaded by a strange aromatic scent, which proceeded from a fire of rare woods from the Indies, upon which from time to time precious spices were sprinkled. A servant, opening a cupboard, took out a bundle of bonds that had been issued by Henry for the French wars, and placed them in the hands of his master, whereupon Whittington immediately flung the documents into the flames of the sweet-smelling fire.

Whether such stories are true or not, the liberality and benefactions of these early men of trade serve to show that they were fully as capable of a grand gesture as are our Carnegies, Yarrows, and other modern captains of industry. The large charities of Whittington have been somewhat overshadowed by the exploits of the Dick Whittington of legend, but Heriot's name is still held in memory by the Heriot foundation schools at Edinburgh, and that of the Fuggers by the miniature town for poor Roman Catholics, the "Fuggerei," at Augsburg.

For centuries before and after Elizabeth's time commerce was a calling full of danger and adventure. The monopolies and other restraints which hedged it about often resulted in conflicts, and merchant vessels had to be suitably equipped either for defence or for aggression. Elizabeth's sea-dogs, flouting the arbitrary assignment of new lands, looked upon the Spanish treasure-ships as fair game, and ships on the homeward journey from Indian factories ran heavy risks before they sighted port (1615).

Restricting Foreign Competition

In England restrictive legislation against foreign shipping began as early as 1381, and reached a climax in the 17th century, when English shipping was almost paralysed by the

enterprise of the Dutch. Cromwell's navigation acts, which, among other provisions, confined England's trade with her colonies to English ships, gave the final blow to the Dutch carrying trade and nurtured English commerce for two centuries.

Guilds v. the Domestic System

As trade and industry increased measures began to be taken for their supervision and regulation, and as early as the 12th century merchants began to associate in the towns for this purpose. These merchant guilds acquired large powers. They made their own members free of tolls, kept out traders from other towns and other countries, and organized the markets. In these early days of trade each household was in great measure able to supply its own needs, but with further expansion of industry and increasing specialization this family system came to be superseded. The men engaged in particular trades began to combine, and by the close of the 14th century nearly every industry and town had its craft guild.

By their system of apprenticeship and by other means the craft guilds did valuable service in maintaining the high repute of the various industries, but in course of time divisions arose within them, and other disintegrating conditions appeared. Those members who had accumulated wealth ceased to labour at their trade and became practically independent, being content to farm out their work. Thus the guilds declined, and their place was taken by the so-called domestic system, under which the work was carried out in the homes of the people.

Apart from naval and commercial enterprise, the explorations that followed the capital geographical discoveries brought a thousand and one problems in their train. The new countries disclosed a profusion of fibres, dyes, chemical substances, and other products, the discovery of which vastly extended the range of industry. The old time-honoured methods were found to be severely overtaxed in coping with the new conditions, and, furthermore, even before the appearance in 1776 of Adam Smith's "Wealth of Nations" (1575), ideas of freedom in industry and commerce were being widely circulated.

The Factory System

Towards the middle of the 18th century England produced a wonderful series of mechanical inventions, notably those connected with the textile industries (1261). The coming of steam power gave a tremendous impetus to the new machines and also to the development of mineral resources. Great ironworks sprang up in districts where coal abounded. Dwellers in

the countryside flocked to the towns to take part in the new industries. The population increased by leaps and bounds. England became the workshop of the world, a land of densely peopled manufacturing towns, and her example spread to other countries. Work was no longer done in the home. Steam power and machinery destroyed the domestic system and created the factory system, and the small industry gave place to the great manufacturing concern.

Effect of the Suez Canal

In pursuance of the new economic ideas the navigation laws were repealed in 1849. In 1869 the opening of the Suez Canal (762) reduced the distance to India by about one-half and restored to the Mediterranean ports a measure of the trade they had lost in the 16th century. Capital and labour were efficiently organized. The application of steam power to land and sea locomotion had started that process of anni-

hilating space which was later continued by the telegraph, the telephone, and wireless.

With the seas thrown open to trade, with the whole world a hive of humming industry, and all the countries of the world brought into close communication, commerce has to-day become a matter of specialization, skilled organization, and strenuous competition.

But, despite all changes, although the days of physical adventure in commerce are past, although the land is for practical purposes explored and the sea charted, the great man of business to-day has ample opportunity for displaying his commercial genius. If he no longer has to seek out markets and trading-points in caravan or ship, like the Phoenicians, the Venetians, and other merchant adventurers of old, he has the different but equally difficult task of organizing his business and instilling into his helpers that enthusiasm which alone wins success.

Picture Aids to the Study of the History of Commerce

(a) FINANCE :

- MAYER ANSELM ROTHSCHILD (1743-1812) :**
 Portrait, 1108.
 Original home in the Frankfurt Ghetto, 1111.
KATHAN MAYER ROTHSCHILD (1777-1836) :
 Portrait, 1110.
BARON LIONEL DE ROTHSCHILD (b. 1868) :
 Portrait, 1114.
 Driving a team of zebras, 1112.
WILLIAM PATERSON (1658-1719) :
 Portrait, 1198.
 Site of the Bank of England, 1193.
 Where the Bank of England started business, 1194.
 The Founding of the Bank, 1195.
 Run on the Bank after the collapse of the South Sea Bubble, 1197.

(b) NEWSPAPERS :

- LORD NORTHCLIFFE (1867-1922) :**
 Portraits, 1443, 1444, 1448.
 His wife, 1446.
 Sutton Place, his country seat in Surrey, 1445.
 With the winner of a *Dadly Mail* prize for flying, 1447.
 Paper and pulp mills at Grand Falls, Newfoundland, 1450.
WILLIAM HENRY SMITH (1825-91) :
 Portrait, 1030.
 His father, 1025.
 Where the business started, 1026.
 Offices in the Strand, 1027.
 Headquarters in Portugal Street, 1028.

(c) OIL :

- JOHN DAVISON ROCKEFELLER (b. 1839) :**
 Portraits, 771, 775.
 His birthplace, 772.
 His home at Cleveland, 773.
 Where he made his fortune, 773.
 In his garden, 774.
 Giving presents on his birthday, 775.

(d) STEEL :

- ANDREW CARNEGIE (1835-1919) :**
 Portraits, 107, 108.
 His birthplace, 102.
 Fittiesville Glen, which he gave to his townspeople, 103.
 How sleeping-cars came to be built for the Pennsylvania Railway, 105.
 Skibo Castle, his home in Scotland, 106.
 Palace of Peace at The Hague, 108.

(e) ARMAMENTS :

- LORD ARMSTRONG (1810-1900) :**
 Portrait, 883.
 Firing a 12-inch naval gun, 887.
 Where he first built ships, 888.
 Elswick works, 889.
 Putting the outside tube on a gun, 890.
 Side-loading torpedo tube, 891.

ALFRED KRUPP (1812-97) :

- Portrait, 1278.
 Workshop at Krupp in the early days, 1277.
FRIEDRICH ALFRED KRUPP (1854-1902) :
 Portrait, 1278.
GUSTAV KRUPP VON BOHLER UND HALBACH (b. 1870) :
 Portrait, 1282.
BERTHA KRUPP (b. 1886) :
 Portrait, 1280.
 A great steam hammer at Essen, 1279.
 Part of the Essen works, 1281.

(f) SHIPPING :

- LORD ARMSTRONG (see above)**
SIR ALFRED FERNANDEZ YARROW (b. 1842) :
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 His mother, 274.
 His home in Hampshire, 275.
 One of his fast destroyers, 269.
 Yarrow-Hillditch steam-plough, 270.
 Yarrow-Hillditch steam-carriage, 271.
 Yarrow steamboat on the Nile rapids, 272.
 Sectional steamboat for the explorer Stanley, 273.
 Gunboat to stop slave-trading on Lake Nyasa, 273.
 Shipyard on the Clyde, 274.
LORD PIRRIE (1847-1924) :
 Portrait, 1361.
 The *Doric* on the stocks, 1358.
 Diesel engine for a motor liner, 1365.
 Hydraulic riveter, 1368.
SIR WALTER RUNCIMAN (b. 1847) :
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 Home of his childhood, 690.
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(g) RAILWAYS :

- LORD STRATHCONA (1820-1914) :**
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 Carrying the Canadian Pacific Railway across the Rockies, 189.
 Driving in the last spike of the first transcontinental railway in Canada, 190.
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GEORGE MORTIMER FULLMAN (1851-97) :
 Portrait, 944.
 First Pullman sleeping-car, 940.
 Explaining the details, 941.
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 Sleeping-berth, 944.

(h) MOTOR CARS :

- HENRY FORD (b. 1863) :**
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 Ford No. 1 and Ford No. 10,000,000, 19.
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A BRIEF SURVEY OF WORLD LITERATURE

The Imperishable Treasures of the Realms of Gold

THE original home of literature, as, indeed, of civilization in general, was Asia, the cradle-land of mankind. In that land of legend and fable man first sought to record the best expression of the best thought.

The industrious researches of learned orientalists have aroused some interest in the philosophical and poetical literature of the East. Sir Edwin Arnold's "Light of Asia" and other Indian studies enjoyed considerable popularity (1516); in 1913 the Bengali mystic, Rabindranath Tagore (1578), was awarded the Nobel Prize for literature; and many of the fables so familiar to us under the name of *Æsop* (1370) came from India.

The poems of Hafiz, the most finished of Persian lyricists; of Firdousi, from whose "Shah-Nameh," or "Book of Kings," Matthew Arnold (1516) took the episode of his poem, "Sohrab and Rustum"; and of Omar Khayyám, in Edward FitzGerald's amazingly skilful adaptations (1538); as well as the "Thousand and One Nights," the stories of which, many of them Persian in origin, have furnished the framework of so many Christmas pantomimes—all these are well known to English readers.

Indeed, the literature of Persia is perhaps more appreciated in the West than that of any other Oriental nation. This preference may be due to the fact that the ancient Persian state, at the periods when it was a conquering empire, overlapped India, Babylonia, and Asia Minor, and thus became an intermediary for transmitting literary culture.

Poetry Appears Before Prose

With the exception, however, of one supreme literary product of Asia, the Old Testament, Oriental literature has left little impression on Western literature, which has, on the whole, proved refractory to the influences of Asiatic institutions and modes of thought. Although the philosophy of early Greece suggests Indian affinities, no actual connexion can be traced, and it is probably no more than a coincidence that the central topics of the two great Indian epics, the "Mahabharata" and the "Ramayana," are, like those of the "Iliad" and the "Odyssey," the one a mighty war and the other the adventurous wanderings of a banished prince.

In one particular the literatures of all countries are alike—poetry appears before prose. The sole exception, the Icelandic sagas, may perhaps be accounted for by the fact that the telling of stories had from very early times been a

popular form of household amusement in the Iceland of the Heroic Age.

Just as a child lives at first in the world of his own sensations and imaginings, and must not too soon be regarded as a rational being, so in the early stages of society man found literary utterance in poetry, the vehicle of the feelings, before he learned to reason in prose. Even with the Greek examples before them the Romans obeyed the universal law and hesitated before embarking upon prose. Quintus Fabius Pictor, the earliest Roman historian, was not born until about 250 B.C., and when he wrote his prose history he wrote it in Greek.

Religious Poetry and Hero-worship

If we examine the beginnings of the literatures of the East or of the West, we find not prose but hymns and other religious poetry and rhythmic tales of the heroes of old. Among the earliest literary monuments are the Vedic hymns of India, in England the Anglo-Saxon epic "Beowulf," the Kalevala of the Finns, and in Greece the Homeric poems. The first poets were either the priests who kept the religious records of the community and guarded the sacred ritual, or the minstrels who sang the deeds of famous men.

EARLY GREEK LITERATURE

The literature of ancient Greece affords a strikingly complete example of how a literature comes into being and stage by stage develops to maturity. Although men have been writing for so many centuries, no important new literary form has emerged since the days of the ancient Greeks, when, unaided by foreign models, literature passed of itself through all the phases of evolution and was brought to a clear-cut perfection that has never been surpassed.

Greek literature is the well-spring of Western literature. All subsequent Western literature has developed along the same lines, with but few and slight variants. The "Iliad" and the "Odyssey" remain the supreme type of epic or narrative poetry; and lyric poetry may still fitly be represented by Pindar (1566), drama by *Æschylus* (1513), history by Herodotus (1545), philosophy by Plato (501), and criticism by Aristotle (1516). Even that apparently modern product, the novel, had its counterpart in ancient Greece in the so-called Milesian tales.

Greek literature grew and developed in ideal surroundings and under ideal conditions. Not only was it rooted in the social and political life of the city state, but each branch of the

Hellenic race contributed its peculiar and distinctive share. The Ionians created epic poetry, the Æolians the lyric of personal passion, and the Dorians the choral lyric, and, finally, the Attic branch of the Ionian stock produced that great glory of the Greeks, the drama (1731), and developed literary prose.

In the Greek city state the opinion of every citizen had influence. Criticism was not in the hands of cliques. The success or failure of a work of art was judged by the whole body of citizens, and only when this constitutional freedom was lost did the true Greek spirit begin to decay.

First Example of Greek Literary Prose

In Greece prose literature was comparatively slow in making its appearance—not, indeed, that the Greeks were slow-witted, but because the basis of Greek culture was in its essence poetical. Where other races at a similar stage of development would have used prose, the Greeks, when they had reached an age of reflection, proceeded to create other kinds of poetry—elegiac and iambic—to enlarge their means of self-expression. Although there had been prose-writers before Herodotus (480 B.C. ? –425 B.C. ?), his history was the first example of Greek literary prose.

Latin literature was built on the foundations of Greek culture. After the fall of Tarentum in 272 B.C., when Greece came under the sway of Rome, Greek literary methods were everywhere adopted by the conquerors. In a sense, therefore, Latin literature is imitative. It is this derivativeness that partly accounts for the vices of the so-called “classic” periods of modern literatures, when inspiration was obtained not from the original literature of Greece, but from Latin literature or, at best, from the stream of Greek culture canalized by the Romans. The inner spirit of the Latin race, however, attained complete expression in many magnificent works of literary art, as in the prose of Livy, Cicero, and Cæsar, and the poems of Virgil, Horace, and Ovid.

INFLUENCE OF FRANCE

With the spread of Christianity and the dismemberment of the Roman Empire the current of literature began to flow in different and scattered channels. Attention was centred in theology and scholarship, and from the 5th century to the 11th scarcely a single notable work of pure literature appeared. During this time of darkness the Celtic and Teutonic peoples that had flocked into the Roman territory had been accustoming themselves to their strange surroundings, and in the 11th century there came into being a literature which for the next

three centuries, and at various subsequent periods, was to be the dominating influence in Europe—namely, the literature of France.

The earlier examples of this new literature were epics. These were addressed to the seigneurs, and dealt almost exclusively with subjects that would appeal to princes and nobles. The *chansons de geste*—the so-called *Matière de France*—celebrated the doings of Charlemagne, Doon of Mayence, and other more or less shadowy figures of French history. The *Matière de Bretagne* was concerned with the personages of the Arthurian story, and the *Matière de Rome* with Alexander and other heroes of classical antiquity.

With the gradual diffusion of literary taste came a form of literature that appealed to all classes, the *fabliau*, “the recital, generally comic, of a real or possible incident occurring in ordinary human life.” These lively verse-tales had an enormous influence, not only in the country of their origin, but throughout Europe. They are the originals of the modern short story. The prose tales of Boccaccio (1523) are largely based on French *fabliaux*, and Chaucer (1528) drew upon them in his “Canterbury Tales.”

The Troubadours

Among picturesque literary types of early France were the troubadours, a caste of lyrical poets that flourished in southern France and also in northern Spain and Italy from the 12th to the 14th century. They were drawn from all classes, and while some relied for their livelihood on their compositions, many were men of high and independent station, and a few even reigning princes. Richard I of England, Cœur-de-Lion, was a troubadour and wrote some admirable lyrics. The fact that the brotherhood included such important personages gave the troubadours remarkable prestige and social influence. They were expert in complicated metrical forms, and sang, in the Provençal tongue, of love and also on political, religious, and other topics. Their love-songs were couched in the language of exalted and conventional devotion.

The names of many of the troubadours have come down to us. Bernart of Ventadour is believed to have been the son of a kitchen scullion. His poetical talents were early discovered, and he was trained for poesy in the castle of the Viscount of Ventadour. Exiled for a love adventure, he afterwards flourished at the courts of Eleanor of Guienne and Raymond of Toulouse.

Another troubadour, Arnaut Daniel, is remembered chiefly by Dante's and Petrarch's praise, due rather to his metrical ingenuity

than to any special excellence apparent in his poems. He invented the *sestina* and other forms of verse.

Peire Vidal of Toulouse was "the maddest man in all the world." Being in love with a lady called Louve (she-wolf), he put on a wolf's skin, betook himself to her castle, and was hunted before her eyes by a pack of hounds. He married a Greek girl, who was supposed to be a member of the imperial family, called himself emperor, and never afterwards travelled without a throne in his baggage. He was a man of very varied poetic accomplishment, and made a great deal of money.

The troubadours were for the most part dependent on the largesse which they obtained at the courts of the great feudal nobles. So long as the seigneurs flourished, the troubadours continued to reap their rewards. Their decay and disappearance were due mainly to political causes. The Albigensian Crusade ruined many of the nobles, and the troubadours, finding their chief means of subsistence gone, gradually died out.

Court Poets of France

During the 12th and 13th centuries a class of court poets known as *trouvères* flourished in northern and central France. These may have owed their rise to the example of the troubadours of the south, but their poetry was of an entirely different character. They confined themselves almost exclusively to amatory verse, and were not esteemed for their emotional force, but solely for their dialectical dexterity. The *trouvère* who was most admired was he who "into the smallest number of lines could put the largest number of ideas, or at least of those commonplaces which envelop thought in its most impersonal and coldest forms." The *trouvères*, with their somewhat frosty art, stand with regard to the troubadours in much the same relation as the German *Meistersingers* to the *Minnesingers* (1647).

"The History of Reynard the Fox"

Another characteristic production of the early French writers was the vast serial beast-epic, the "Roman de Renart" or "History of Reynard the Fox," which for nearly two centuries served as an outlet for satirical comment on things in general. In the "Roman de la Rose," which was translated by Chaucer, France provided Europe with a model for allegory. Started by Guillaume de Lorris and continued by Jean de Meung, this amazing poem affords a striking picture of the life and thought of the times. At this early stage, as later, France played an important part in the development of the drama.

Foundation of Historical Writing

In prose Geoffrey de Villehardouin (1160?-1213) laid the foundation of historical writing with his vivid picture of feudal chivalry in its prime, "The Conquest of Constantinople." Two centuries later he was followed by Jean Froissart (1338-1410), whose equally picturesque chronicle depicts feudalism at a period when the spirit of chivalry, though widely spread, was in its decadence.

ITALY'S LITERARY SUPREMACY

In the 14th century the literary supremacy of Europe passed to Italy, where Dante (1265-1321) and Petrarch (1304-1374) infused a new spirit into poetry, and Boccaccio into prose. By reason of her material prosperity and political independence Italy was ripe for throwing off the shackles of mediævalism, for absorbing the treasures of classical learning and reproducing them in natural and native forms. The Revival of Learning had yet to come, but modern literature was at hand. Mediæval though his outlook is, Dante acknowledged Virgil as his guide, and Petrarch and Boccaccio alike were pioneers of the new learning.

These great achievements did not immediately raise up rivals in the shape of Italian vernacular poetry and prose. They were followed rather by an intense application to the recovery of the classic past and during the 15th century Italian writers were almost entirely taken up with scholarship and antiquarian research.

The Revival of Learning

Before the century closed the first-fruits of the Revival of Learning appeared in the Italian poems of two famous scholars, Politian (1454-94) and Lorenzo de' Medici (1449-92) (1557), and in the "Orlando Innamorato" of Boiardo (1434-94). These are the first examples of modern literature, and in the "Orlando Furioso" of Ariosto (1474-1533) (1516), which was modelled on Boiardo's poem, Italian Renaissance poetry had attained its highest excellence.

But there was a dark side to this brilliant Italian culture. What the nation gained in intelligence it lost in morals. With all her new refinement Italy became relaxed in fibre. Private quarrels were increasingly settled by poison or the bravo's dagger, political differences adjusted by unscrupulous diplomatists, who, if war came, put the fighting in the hands of mercenaries. What a pitch of corruption Renaissance Italy reached can be seen in those famous treatises, "The Prince" and the "Discourses," in which Machiavelli (1469-1527), the typical political genius of his age and country,

in describing his ideal republic and monarchy, unflinchingly subordinates morality to political expediency

FRANCE AND THE RENAISSANCE

France was quick to respond to Renaissance influences. In the poems of François Villon (1431?-85?) (1584) and in the history of Philippe de Comines (1445?-1511?) (1529), although both are mediæval in form, traces of the new spirit can be discerned—in the former a modern vividness of self-portraiture, in the latter a penetrating and logical analysis of practical affairs. Clement Marot (1496-1544) (1556) and his school purged the language of the Latinisms introduced at the Revival of Learning, and later Pierre de Ronsard (1524-85) (1570) and his colleagues of the Pleiad, by reducing the language and literary forms to a state comparable with that of the Greek and Latin classics, were instrumental in making modern French. The practice of memoir writing and letter writing started, in both of which France has always excelled every other nation. Of the early memoir writers a typical example is Pierre de Bourdeille, Seigneur de Brantôme (? 1540-1614), whose gossiping writings give a placidly complacent view of the profligate court life of the time. On the religious side, John Calvin (1509-64), in his "Institutes," the textbook of the French Reformation, produced a magnificent piece of apologetic literature (1525).

But the French Renaissance was to produce a greater writer than any of these—one who may be ranked among the giants of all time. In his astounding masterpiece of mingled wisdom, humour, and levity is reflected the very spirit of the age in which he lived, in the commanding figure of François Rabelais (1483?-1553) the Renaissance is incarnate (1566).

BIRTH OF THE ESSAY

In marked contrast to Rabelais' exuberant drollery is the quiet irony of Michel de Montaigne (1533-92), the inventor of that delightful form of literature, the essay (1559). In the essays of Montaigne, brilliantly picturesque though they are, the freshness of the early Renaissance has faded and has given place to a less eager mental attitude.

Most new forms of literature are the result of gradual growth, but the essay sprang suddenly into being in 1571, when Montaigne, taking shelter from the fatigues of the world in his tower-study, started to produce a picture of his soul. Though invented by a Frenchman, the essay was not taken up by French writers until Sainte Beuve (1804-69) revived the form with his "Causeries du Lundi" (1571).

English Essayists

In England Francis Bacon (1411) published his first essays five years after Montaigne's death, but he rarely compassed the seemingly informal ease of Montaigne. Abraham Cowley (1618-87) came much nearer in such essays as his "Of Myself" (1530). In the 18th century the essay had a great vogue in the hands of Addison (1513), Steele (1577), and Goldsmith (1541), but it gradually lost its freshness and lapsed into pedantry and sentimentality. Later Charles Lamb (1115) restored its popularity by re-introducing the intimate personal flavour, and was followed by Leigh Hunt (1546) and William Hazlitt (1544). With Macaulay (1554) the essay again lost its familiar note and became a vehicle for trenchant enforcement of opinion. Towards the close of the 19th century R. L. Stevenson (25) harked back to the earliest model, and in "Familiar Studies of Men and Books" and other charming essays touches hands with old Montaigne.

GERMANY AND THE RENAISSANCE

What Rabelais was for France, or Ariosto for Italy, Luther (1554) was for Germany, where the Renaissance for the most part took a religious form. Luther's Bible is, indeed, a German classic, and formed the basis of the literary language. His hymns provided an impetus for a great development in religious poetry.

ENGLAND AND THE RENAISSANCE

In England the Renaissance flowered late. Its full effect was not felt until the last quarter of the 16th century. Before that century the only English man of letters who had any knowledge of Italian literature was Chaucer, and before Chaucer's time English literature had, with the exception of Old English, been more or less dominated by French themes and forms. Even before the Norman Conquest French was the medium of ordinary intercourse among the higher and middle ranks of society, and it was not until the 14th century, when English became the language of the schools and the Court, that the path was clear for a thoroughly national literature that would appeal to all classes. Although Chaucer borrowed from Italian and French literature, his genius was English to the core, but this first burst of English song died with Chaucer for over a hundred years in the troubles of the times.

The English Renaissance of letters was the richer for the delay. The ground had been thoroughly prepared for the momentous change. The horizon, political and religious, was clear. In the wake of the gentle Erasmus (1536),

such English scholars as John Colet (1467?-1519), the founder of St. Paul's School, had spread a deeper knowledge of the Greek and Latin mind (1529). The spade-work, however, had already been done in other countries, and English writers benefited by being able to draw not only on the originals and translations of the classics, but also upon what this or that Italian or Frenchman had written with the classics open before him. Shakespeare (829) took his classical plots from Plutarch, but Plutarch was Montaigne's favourite author, and Shakespeare was undoubtedly influenced by what the French essayist had to say of the heroes of antiquity.

Indeed, there was some danger that English literature might lose its native character in this process of imitation and assimilation, but the natural vigour of the English genius triumphed. Although Spenser (1576) modelled the "Faerie Queene" on Ariosto's "Orlando Furioso," his allegorical epic in praise of moral worth mirrors to the full the soul and aspirations of Elizabethan England, and the same is true of the Elizabethan drama (1738), which is the supreme exponent of the English Renaissance. and of Shakespeare, that drama's and the nation's finest flower.

Robert Herrick

Apart from dramatic verse, one of the most typical of the Renaissance poets was Robert Herrick (1591-1634), the Epicurean Devonshire parson, whose tiny lyrics of "May-poles, hock-carts, wassails, wakes, of bridegrooms, brides, and of their bridal-cakes" give an exquisite picture of English country sports and lore in a manner that recalls the beauties of Horace and of the poets of the Greek anthology (1545). Strongly opposed to these were the poems of the devouter section of the "metaphysical" school, of such writers as John Donne (1573-1631) (1533), George Herbert (1593-1633) (1545), and Richard Crashaw (1613-50), in which is seen a kind of revulsion against man's claim to pleasure.

Milton, Bacon, and Clarendon

With Milton's "Samson Agonistes" (1671) the Elizabethan age ends, and with it the literature of the English Renaissance. Milton (611) was pre-eminently the poet of Puritanism, the supreme exponent of that spirit of protest. He was immersed in the learning of the ancients, and his "Paradise Lost," with its overture, interpolated episodes, and other devices of representation, recalls the old classical epics.

Whereas poetry had quickly found a standard, it was far otherwise with prose, which was slow in settling. The prose of the period was in the main cumbersome and highly latinized, and prose

writers were disinclined to submit, as in France, to any recognized canons. Although the master of a magnificent and varied English style, Francis Bacon, like so many contemporary leaders of thought, was of opinion that English had little prospect of seriously competing with Latin. Edward Hyde, Earl of Clarendon (1609-74), the author of the "History of the Rebellion," was the last accomplished wielder of the old sinuous prose (1528). Meanwhile, the Authorized Version of the Bible (1611), the fruit of the work of generation after generation of earnest and skilful translators, exerted a powerful and lasting effect on prose writing.

Puritan Writers

At the Restoration English literature came under French influence. Cavalier exiles brought home with them the culture of France, where sympathy with the original Greek tradition had grown dim and had yielded to cultivation of the secondary Latin writers. With the encouragement of the Court, poetry became social and personal, and tended to run in satirical and gallant channels, while prose lost its Latin flavour and became more like the language of conversation. Samuel Butler (1612-80), with his agile and unbridled attack on the anti-royalist party, "Hudibras," set the tone for a regular school of satire. In prose and poetry, however, as well as in drama, John Dryden (1631-1700), the first modern, was supreme (1533). A nobler prose, inspired by the Bible, is seen in the works of such Puritan writers as Richard Baxter (1615-91), "the chief of English Protestant Schoolmen" (1519), and John Bunyan (1628-88), the author of the immortal "Pilgrim's Progress" (1199).

Eighteenth-century Prose

The 18th century in England was pre-eminently an age of prose. Nearly every variety of prose flourished, and many types of prose writing with which we are now familiar then first came into use. Poetry reached the highest pitch of immaculate polish in Alexander Pope (1688-1744) (1567), whose classically perfect verse, extolled though it was by Voltaire (1003) and by a host of English worshippers and imitators, led to a many-sided reaction, which culminated in the romantic movement and the romantic triumph.

Addison and Steele

As English trade increased, city life became correspondingly intensified and the habit of reading spread to all classes of society. Chief among those who provided the forms that became so popular were Addison (1513) and Steele (1577), with their graceful, good-humoured

essays in the *Spectator* and the *Tatler*; that master of irony, Jonathan Swift (1578), with his "Gulliver's Travels" and his biting political pamphlets; Daniel Defoe (1532), with his detective journalism that led to "Robinson Crusoe"; Samuel Johnson (777), the literary dictator of the time, whose resonant writings are now little read, but whose forthright personality lives again for us in the pages of the king of biographers, James Boswell (1524); and Oliver Goldsmith (1541), whose delicate touch illumined every topic upon which he wrote.

THE ENGLISH NOVEL

Of all the types of writing that came into vogue in 18th-century England, the most important is the novel, which was launched by Samuel Richardson (1570) with his "Pamela" in 1740. The somewhat calculating morality of "Pamela" served to bring out manlier types of novel in the "Joseph Andrews" (1742) and "Tom Jones" (1749) of Henry Fielding (1538) and the "Roderick Random" (1748) of Tobias Smollett (1575). But Richardson kept to his own models, and followed up "Pamela" with "Clarissa Harlowe" in 1748 and "The History of Sir Charles Grandison" in 1753.

The novel has a long history. In the 2nd century B.C. Aristides of Miletus, with his Milesian tales, and in the 2nd century A.D. Lucian (1554), with his "True History" and "Lucius or the Ass," regaled the Greeks with sarcastic and humorous sketches of everyday life, and Petronius, who died A.D. 65, amused the Romans of the Neronian age with a remarkable work of fiction, "The Satyricon."

The "Morte d'Arthur" of Sir Thomas Malory (1555), printed by Caxton (594) in 1485, may perhaps be regarded as the first example of English prose fiction. This splendid work, however, had greater influence on poetry than on prose.

Borrowed from Italy

The real starting-point of the English novel, as of the modern European novel generally, was the Italian *novella*, which became very popular in England towards the close of the 16th century, when Italian literature was eagerly read. Conspicuous among early Italian writers of fiction was Jacopo Sannazaro (1572), whose pastoral romance, "Arcadia" (1504), is an important landmark in the evolution of the novel. It was Sannazaro's "Arcadia" that suggested Jorge de Montemayor's pastoral novel, "Diana" (? 1559), which in its turn inspired Sir Philip Sidney (1575) to write his "Arcadia" (1590) and Honoré d'Urfé (1582) his "Astrée" (1610), the starting-point of the French novel, and from writing plays led

Cervantes (1526), the author of the immortal "Don Quixote," by way of his pastoral romance "Galatea," back into the paths of fiction.

In 1579 John Lyly (1554) wrote his famous "Euphues," which has been called "the first original prose novel written in English." In this work he based his matter on the Italian *novelle* and his pompous antithetical style on that of the Spaniard, Antonio de Guevara (? 1490-1544). The vogue of the over-philosophical Euphuists, however, was short, and was succeeded by an influx of prolix French romances, which postponed the arrival of the English novel.

Defoe and Richardson

The essays of Addison and Steele, packed though they were with deft and delicate character-drawing, had no plot and no constructive handling. Defoe (1532) came nearer to the novel in his minutely observed "Colonel Jack" (1722), and even nearer in "Robinson Crusoe" (1719). The English novel was at hand; only a touch was needed to bring it into being.

This was supplied by Samuel Richardson (1570). From his youth up this typical "good apprentice" and prosperous respectable citizen had explored the recesses of the female heart by acting as the counsellor and confidant of women. Letters innumerable he had penned for the girls of the neighbourhood, to help them in their perplexities. And so it came about that the first modern English novel, "Pamela: or Virtue Rewarded," was written in the form of a series of letters calculated to warn inexperienced young persons of the pitfalls of life.

The "Return to Nature" Movement

The pressure of life in crowded centres was soon to bring about a change in the spirit of literature. Man, it was felt by many, had grown too sophisticated, literature too artificial. The trimness of landscape-gardening was not to be compared with the grandeur of natural scenery. The movement for a "return to nature," initiated by J. J. Rousseau (1571), was in the air. The classical spirit had been found to be stale and unprofitable, and fresh vigour could be obtained only by going back to nature and to the untilled past in search of the picturesque. The old standards could not hold when men were thinking of freedom and the people were making themselves heard. Love of liberty gave the cue for free expression of thought and feeling.

In 1726 James Thomson (1580), with his poem, "Winter," had pioneered the revolt against the frigid artificiality of poetry. Thomas Gray (1542), in 1750, followed with his exquisite

"Elegy Written in a Country Churchyard." Other manifestations of the new spirit were the welcome given to such works as James Macpherson's (1555) Ossianic poems (1760), and Bishop Percy's (1565) "Reliques of Ancient Poetry" (1765), and notably to the spurious 15th-century poems concocted by the 17-year-old Thomas Chatterton (1752-70) (1528). The way was pointed out in prose by that lover of the antique and the curious, Horace Walpole (1585), in his novel of terror and mystery, "The Castle of Otranto" (1764), and later in verse by William Cowper (1731-1800), the poet of "The Task" (1530); by William Blake (1757-1827) in his early lyrics (1522); by that fiery genius, Robert Burns (1759-96), who sang the brotherhood of man (1525); and by Wordsworth (1591) and Coleridge (1529) in the "Lyrical Ballads."

In this general movement towards enlightenment England bore a large part. With Voltaire's arrival in England in 1726 a period of Anglomania, of intense admiration of English ideas and institutions, had set in (1003). No longer did English writers look to France. The current began to flow in the opposite direction. Henceforward not only was the French mind coloured with English thought, but France became the interpreter of the new ideas between England and the rest of mankind.

Goethe

Germany, too, entered the arena and became a force in European literature. This change came about after Lessing had delivered his countrymen from the yoke of French pseudo-classicism by directing them to the study of the Greek dramatists and Shakespeare. In spite of Goethe's classicism, although the great universal genius crossed the Alps on his memorable journey into Italy with his carriage shutters closed, it was upon his "Wilhelm Meister" that the young German romantic writers modelled their fiction (193). English and German influences became strangely intertwined. The English romanticists were influenced not only by the old English masters, but also by the writings of Germans who had been inspired by those masters. Thus Scott was influenced by the beauties of the old national poetry as revealed by Percy's "Reliques" and also by such German ballads as "Lenore," which G. A. Bürger had written under the inspiration provided by Bishop Percy.

Scott and Byron

The poetry of Wordsworth (1591), Coleridge (1529), Keats (1540), and Shelley (1574), full though they were of fresh beauties and fresh tendencies, were not sufficient in themselves to

establish the new spirit firmly in the minds of men. Stronger stimulants were needed, and these were found in the stirring lays of Scott (945), and in Byron's poems of freedom, passion, and revolt, which echoed throughout Europe (359).

The Waverley Novels

In his novels, too, Scott (945) was the acknowledged leader of the romantic movement. Here he not only carried on the best traditions of the 18th century, but also represented to the full the passion for the picturesque past started by "The Castle of Otranto," as well as that sympathy and affection for the poor and humble which Burns had sung with such intensity of feeling.

LETTERS IN THE VICTORIAN ERA

The Victorian era was a period of immense literary activity, and among the Victorian writers are many of the greatest names in English literature. It was an age of vast social and intellectual movements, and these were conditioned no less by the force and genius of contemporary writers than by the spirit of the time. Among outstanding phenomena of the age were the growth of democracy and humanitarianism; the rapid progress of science and the consequent disturbance of thought and faith; the industrial upheaval caused by the increasing application of science to the purposes of everyday life, and the resulting conflict between materialism and idealism; a deepened feeling for nature; the growing development of the romantic spirit, which urged men to seek an imaginative escape into the past; and an impassioned zeal for reform. All or most of these are reflected in the writings of the Victorians.

Tennyson's Flawless Technique

Tennyson (1031) and Browning (1403) are the two most representative Victorian poets. By dint of careful and unremitting labour Tennyson achieved a flawless technique, which has never been surpassed. He is the master of the word-painters. Over all his work broods an air of mystic beauty, whether he sings of "English homes and gardens, or of the enervating land of the lotus-eaters, or of Arthur's dim realm, where the wind stirs tapestries on castle walls or plucks the silken curtains of pavilions." With less melody than Tennyson, Browning probes deeper into the recesses of the mind, and in both is seen the uneasiness caused by the changing spiritual temper of the time.

Strongly influenced by Goethe and perhaps even more by Wordsworth, Matthew Arnold

(1516) sought in the soothing touch of nature the anodyne for life's disillusionments and disappointments. In "Thyrsis," a monody on his friend A. H. Clough (1529), he produced one of the finest elegies of all time.

In the attempt to recapture the charm of the Middle Ages remarkable work was done by the group of enthusiastic poets that included the poet-painter D. G. Rossetti (465, 215, 1451, 1452, 1453), William Morris (1559), and A. C. Swinburne (1578). "Poems and Ballads" Swinburne wrote under the direct influence of this mediævalizing movement, but in his other work he was variously inspired, among others, by Shakespeare, of whom and of the Elizabethan dramatists in general he was an idolatrous admirer, by the arch-romantic Victor Hugo (695), and by the Italian patriot Mazzini (1557). Ever a rebel, Swinburne warred against kings and priests, and, indeed, against most established institutions and conventions, and in keeping pace with the intensity of his passion he materially widened the bounds of lyrical resource.

Dickens and Thackeray

The two greatest Victorian novelists, Dickens (527) and Thackeray (1580), rigidly respected the religious, ethical, and political conventions of the time. Dickens, Cockney to the core, devoted his boisterous, genial pen mainly to depicting the life and manners of the lower and middle classes. Though a cosmopolitan at heart, Thackeray was much occupied with the structure of English society, and his satire is confined within the polite sphere of the English upper classes.

Prophets of the Victorian Era

In Carlyle (1233) and Ruskin (1341) the Victorian era had its prophets. Unlike the great historian, Macaulay (1554), who extolled the material advances of his time, Carlyle despaired of the present, tilted against modern shams and hypocrisies and what he regarded as the surfeit of civilization, and with almost uncouth insistence held up for admiration the mighty men of the past. He was one of the first Englishmen who had knowledge of German literature, and his writings are tinged with German philosophy. By the very earnestness of his desire to promote high ideals he was a great stimulator and moulder of thought.

Like William Morris, Ruskin was one of those who lifted the fine arts into a place in literature, and each, with the artist's hatred of machinery and industrialism, turned later to social reform. Ruskin expounded art in its relation to life and morals, in prose which ranks among the most magnificent in the English language.

WOMEN NOVELISTS

Since Richardson had dissected the human heart that dangerous topic had been studiously avoided by novelists. Even that fine flower of the expiring 18th century, Jane Austen (1399), had worked within a clearly prescribed limit—the little perplexities that arise in the daily comedy of provincial family life. This attitude was now to be altered, and the revolution was accomplished by a delicate little woman, who had spent most of her life in a remote country parsonage. The introspective novel was revived by Charlotte Brontë (277) with "Jane Eyre," and her frank handling of the passion of love startled Victorian England out of its former reticence.

Another woman, George Eliot (1063), astonished the world by her unforgettable pictures of a society that has long since vanished. Her little dramas of the Midlands were acted by quite ordinary performers, but by her genius, sympathy, and compassion become parts of the great drama of life.

In "Cranford" another early Victorian novelist, Mrs. Gaskell (1400), charms with her delicate pictures of remote provincial life. These five novelists, in greater or less degree, all occupy themselves with problems of social or moral reform.

Meredith and Hardy

Of the later Victorians the two that had the greatest and most lasting influence on their followers are George Meredith (1558) and Thomas Hardy (863). In their novels, as in their poems, both were master analysts of the human soul. Discarding the prejudices that had hampered so many of their predecessors, they saw life singly, through their own eyes. Man and nature in their reciprocal influences are their theme. In his studies of action and motive Meredith dwells upon the harsh discipline to which nature subjects man. Hardy, in his dramas of rustic life and its tragic-comedy, regards men and women as the sport of circumstance, puny beings fretting feebly against inexorable fate.

Robert Louis Stevenson

Towards the close of the 19th century the novel came under French influence, and tended to become shorter and more highly polished. The exquisite, carefully elaborated work of R. L. Stevenson (25) contributed to the same end, and the example that he set in style, technique, and meticulous regard for form had a profound effect on later novelists. A similar influence was felt for a time in poetry and in critical prose, and produced such instances

of the "art for art's sake" movement as the work of Oscar Wilde (1889) and Arthur Symonds (1878), although the older traditional verse was still ably represented by Robert Bridges (1872) and William Watson (1877).

Realism in Poetry

A later tendency in poetry was in the direction of actuality, of using the language and the topics of everyday experience. This style was introduced by W. E. Henley (1849) in his "Hospital Verses" and "London Voluntaries," and was employed by Rudyard Kipling (1865) with extraordinary power, and by many other Georgian poets. Like Meredith and Hardy, these poets strove to look at life as it really is, to pierce through the maskery of old and deep-seated prejudices and traditions. The World War accentuated this attitude. Songs not of martial glory but of quiet, peaceful England came from the trenches, songs in which the writers sought a metaphysic which would, without capitulation, bring the horrors of war into line with the actual scheme of life.

BRITISH NOVELISTS OF TO-DAY

The novel still remains the most popular form of literature. In topic it ranges wide, but perhaps the most distinctive feature of modern novelists is their frankness, in which quality they have increased amazingly since the Victorians were first untaught their shyness. Now the life-force is one of their main preoccupations. Among outstanding exponents of the novel are Arnold Bennett (1872), who made his name as the minute delineator of life in the Potteries district; John Galsworthy (1867), who probes deep into the social and moral conventions of the age; and H. G. Wells (1866), with his penetrating analysis of the foibles and tendencies of English society and his uncanny insight into the developments of scientific progress. As a portrayer of the elemental passions, Sir Hall Caine (1839) won immense success with his *Manx* and other stories.

THE NOVEL IN FRANCE

As for the fortunes of the novel in other countries, in France d'Urfé's *"Astrée"* (1610) was followed by a succession of enormously long and extravagant romances, which were effectually killed by the ridicule of Paul Scarron (1631) and Antoine Furetière. A substitute for these interminable romances was provided in the year 1678, when Madame de La Fayette published her short and simple *"Princesse de Clèves,"* the first French novel of moral analysis. The *"Gil Blas"* and *"Le Diable Boiteux"* of A. R. Le Sage (1668-1747), admirable though they are in style and artistic truth, are scarcely

to be distinguished from the Spanish romances on which they were modelled (1552).

The next advance was made with the *"Marianne"* (1731) of P. C. Marivaux (1688-1763) and the *"Manon Lescaut"* (1731) of the Abbé Prévost d'Exiles (1697-1763) (1587). After the *"Nouvelle Héloïse"* (1760) of J. J. Rousseau (1712), the forerunner of romanticism, and the *"Paul et Virginie"* (1788) of Rousseau's disciple, Bernardin de Saint-Pierre (1732), the way was clear for the French novel, which, after the triumph of romanticism exemplified by Victor Hugo's *"Hernani"* in 1830, became one of the regular vehicles for imaginative writing (695). Dumas (1800) and Hugo were the giants of historical romance; George Sand (1804) inaugurated the idealistic novel; the realistic novel was launched by Stendhal (M. H. Beyle) (1777) and Balzac (1799); and Zola (1852), Maupassant (1858), and Daudet (1839) became distinguished exponents of the "naturalistic" school. For absolute perfection of style Gustave Flaubert (1819), the author of *"Madame Bovary"* and *"Salammbô,"* stands supreme. This perfection was achieved only by unceasing effort. Sometimes he would be a week in writing a single page; he spent six years in writing *"Madame Bovary."*

THE NOVEL IN GERMANY

The *"Simplicissimus"* (1669) of H. J. C. von Grimmelshausen is generally regarded as the earliest German novel. It is a realistic description of military episodes in the Thirty Years' War, and is mainly autobiographical. It was followed in the early 18th century by countless imitations of Defoe's *"Robinson Crusoe."* The advent of the German psychological novel was due to the example of Richardson, whose influence is clearly seen in C. F. Gellert's (1740) *"Die Schwedische Gräfin"* (1746), and a further impetus in this direction was given by C. M. Wieland's *"Agathon"* (1766) (1589).

The first German novel that attracted attention outside Germany was Goethe's *"Werther"* (1774), and in his own country an even greater influence was exerted by his *"Wilhelm Meister"* (1796), which long served as a model (193, 61). Jean Paul Richter's stories, too, had widespread influence (1570). The fantastic novels of Klemens Brentano (1778-1842) and L. A. von Arnim (1781-1831) are typical products of the later romantic school.

After the revolution of 1848 the novel became an important feature of the literary output. Gustav Freytag scored an enormous success with *"Soll und Haben"* (1855), in which he dealt with middle-class commercial life; but at a time when social and political problems

were pressing, the splendid series of historical novels by Wilhelm Häring ("Willibald Alexis," 1798-1871), the German Sir Walter Scott, stood almost alone in this branch of writing. Apart from developing the faculty of producing charming pictures of peasant and country life, the German novel, after a short and somewhat ill-advised excursion into realism, returned to the more congenial sphere of the psychological problem.

THE NOVEL IN ITALY

Among the best-known of later Italian novelists are Antonio Fogazzaro (1842-1911), the author of the immensely popular "Il Santo" (The Saint, 1906), Matilde Serao (born 1856), whose carefully observed pictures of ordinary Italian life are marked by deep insight (1574), and the fiery patriot, Gabriele d'Annunzio (1516). After the 16th century, when Italian novels were popular throughout the length and breadth of Europe, novel-writing became almost a lost art in Italy. The patriotic fervour of Alfieri (1514) gave a new impetus to Italian literature, and in 1825 Italy produced one of the master novels of the world, "I Promessi Sposi" (The Betrothed). Though cast in the shape of an historical novel, Manzoni's masterpiece is far more than an historical romance (1555). It is a miracle of realistic art. The characters, one and all, live as though they were standing before us. It was Manzoni who turned Italian literature into that vein of realism that has distinguished it ever since.

THE NOVEL IN SPAIN

Spain has produced little fiction that has penetrated beyond the rampart of the Pyrenees. Apart from the writings of such moderns as Ibañez (1546), whose epic of the World War, "The Four Horsemen of the Apocalypse," and other novels are widely known, Spanish fiction has been too local and too remote in interest to gain much recognition outside Spain. The one important exception is "Don Quixote." This is a favourite among world-books, and entitles Cervantes (1526) to a place among the greatest names in literature. Although Cervantes doubtless embarked on his immortal book with the intention of ridiculing the extravagant romances of chivalry, that was not his main and ultimate aim. In his brilliant panorama of 16th-century Spanish society, Cervantes enlists our fullest sympathy for his melancholy knight, is loud in his praises of the true chivalrous spirit, and shows with wide humanity and pathos the danger of exaggerating that spirit, which in its inordinate pride of race and consequent disdain of honest toil eventually ruined Spain.

THE NOVEL IN RUSSIA

Russia leapt into world-wide literary fame in 1842, when N. V. Gogol (1809-52) published his great novel, "Dead Souls" (1541). Up to that time Russian novelists had for the most part been content to follow somewhat slavishly in the footsteps of Sir Walter Scott. Gogol's realistic pictures of provincial life, tinged with the characteristic Russian sadness and resignation, are typical of all subsequent Russian fiction. Gogol was followed by Ivan Turgenev (1818-83), whose years of exile added a cosmopolitan flavour to his work (1582); F. Dostoevski (1821-81) (1533), Tolstoy (1828-1910) (81), and Maxim Gorky (born 1869) (1542). With the revolution of 1917 literary activity in Russia came to an end.

THE ART OF THE SHORT STORY

Close on the heels of the novel in popularity comes the short story, which in the hands of such modern masters as the Russian, A. P. Tchekhov (1860-1904), has reached a very high pitch of technique and subtlety in the telling. It originated, by way of the old Eastern tales and fables, in the French *fabliaux*, and with these lively verse-tales in his mind Boccaccio (1523) set the fashion, with his brilliant collection of prose-tales, "The Decameron," for a long series of Italian imitators.

The Psychological Tale

For centuries this form of literature was comparatively neglected, until *Blackwood's Magazine* began to make a feature of short sensational tales. These "Tales from Blackwood" became known far and wide. In America there was a young man who lived in an atmosphere of magazines; editing, reviewing for, and contributing to magazines was his means of livelihood. In the course of his work Edgar Allan Poe (1809-49) came across these sensational English stories and set about to make himself a master of the psychological tale (1567). After winning a prize for a story in an American magazine, he devoted himself to tales in which all his genius was concentrated in producing the thrill of terror, mystery, or fascination, and in this special province he became supreme.

In his short stories Poe proceeded on this carefully defined plan:

A skilful literary artist has constructed a tale. If wise, he has not fashioned his thoughts to accommodate his incidents; but having conceived, with deliberate care, a certain unique or single effect to be wrought out, he then invents such incidents—he then combines such events as may best aid him in establishing this preconceived effect. If his very first initial sentence tend not to the outbringing of this effect, then he has failed in his first step. In the whole composition there should be no

word written of which the tendency, direct or indirect, is not to the one pre-established design. And by such means, with such care and skill, a picture is at length painted which leaves in the mind of him who contemplates it with a kindred art, a sense of the fullest satisfaction.

How his theory succeeded is proved by the directness, simplicity, and dramatic unity of his tales. "The Fall of the House of Usher," with its sultry atmosphere of impending disaster, and that marvellous piece, "The Man of the Crowd," are perfect examples of their kind. His method is admirably exemplified in the grim little tale of vengeance, "The Cask of Amontillado," with its dramatically suggestive opening—"The thousand injuries of Fortunato I had borne as I best could, but, when he ventured upon insult, I vowed revenge"—its skilful working out of this simple motive, and its equally dramatic *dénouement*.

Hawthorne's Symbolism

Poe owed much to another American, Nathaniel Hawthorne (1804-64), who, besides possessing singular grace of language, has few equals in suggesting atmosphere, and who, moreover, employed symbolism to gain effects of truth. Such stories as "The Birthmark," suggested perhaps by the old gossip that Sir Kenelm Digby had killed his wife by a prescription of his own given to her to preserve her beauty, and "Rappaccini's Daughter"—based on the legends of beautiful women, who, fed on poisons, have themselves become deadly—are sufficient to show that in Hawthorne (1844) Poe had a worthy model.

The Genius of Maupassant

France came into her own again in the full-flavoured tales of Balzac, Hugo, and Dumas, and later in the daintily chiselled short stories of Prosper Mérimée (1558) and Théophile Gautier (1540). The French poet, Charles Baudelaire (1821-67), found a twin soul in Poe, and translated his works. But it is in the tales of Maupassant (1557) that the French short story attained its highest point. Maupassant prided himself on having no invention, but he discovered the inner meaning of what he saw around him, and in the simplest and at the same time the most forcible language described what he had found.

Rudyard Kipling

It fell to R. L. Stevenson (25) to graft the short story of the modern French type upon the English literary stock, and the new form had a fit sponsor in one who was the author of so delicately beautiful a fantasy as "Will o' the Mill" and of so vivid a glimpse of 15th-century France as "The Sire de Malétrait's Door."

As in his essays he had gone back to the earliest model, Montaigne (1559), so in his short stories Stevenson based himself largely on the methods of the acknowledged masters, Poe and Hawthorne.

The English short story next came into the hands of Rudyard Kipling (109). With Poe and Maupassant for his guides, Kipling soon struck out a path for himself. This he trod with versatile and ever-increasing success, and with these accomplished pioneers the short story became firmly rooted in England.

German Masters of the Short Story

Germany has given much attention to this branch of literature. Among German masters of the short story are B. Auerbach (1517), with his tales of peasant life in the Black Forest; Gottfried Keller (1549), whose stories of Swiss country life are among the finest in the language; and Paul Heyse (1545), whose exquisite art gained him the Nobel prize.

The Pre-eminence of France

The pre-eminence of France in the short story is significant of French literature as a whole. It excels on the lighter side, as becomes a literature of which the greatest exponents are Rabelais (1568) and Molière (1167). But although France has produced few great epics or great tragedies, she has given us, as Professor Saintsbury (1571) says:

the most delightful short tales, both in prose and in verse, that the world has ever seen; the most polished jewellery of reflection that has ever been wrought: songs of incomparable grace; comedies that must make men laugh as long as they are laughing animals: and, above all, such a body of narrative fiction, old and new, prose and verse, as no other nation can show for art and for originality, for grace of workmanship in him who fashions, and for certainty of delight to him who reads.

This grace of workmanship, which is so characteristic of French literature, was not achieved without effort. Indeed, in few other literatures have precision of style and thought played so large a part and been so systematically pursued. The reforming zeal of Marot and Ronsard and their associates was followed by the labours of François de Malherbe (1556-1628), who exerted a powerful and lasting, though not entirely beneficial effect on French literature. Malherbe was largely responsible for determining the forms of French classical tragedy, and his restraining hand was useful in curbing the often ill-judged ardour of the Pléiade and in simplifying and purifying the language and methods of poetry. But his ignorance of and disregard for the older poetry and his passion for correct diction are still discernible in modern French poetry, in spite of the romantic revolution.

The most methodical and most influential of systematizers was Boileau (1636-1711) (1523), who wrote a kind of code for poetry, "L'Art Poétique" (1674), based on Horace's "Ars Poetica." Valuable though his rules were, they tended to make the writing of poetry little more than a clever trick. His maxims were eagerly absorbed in England, and produced that correctness which is so marked a feature of the poetry of Queen Anne's reign. Alexander Pope (1567) imitated "L'Art Poétique" in his masterly "Essay on Criticism" and modelled "The Rape of the Lock" on Boileau's "Lutrin."

FRENCH LITERATURE (17TH CENTURY)

The character of the literature of 17th-century France was determined by political conditions. Through the labours of Richelieu (1570) and Mazarin (1557) all power had been consolidated in the hands of the monarch, with the result that individualism was rigorously checked, and literature, as well as every other manifestation of the individual, was as rigorously regulated according to a prescribed plan. Classicism was the order of the day. The French Academy was founded in 1635 with the express purpose of purifying and embellishing the language. Richelieu, a powerful patron of the Academy, was devoted to the stage, and henceforward drama was to become the most acceptable form of literary composition, while other branches were disregarded. The age produced Molière (1167), the greatest master of modern comic drama, and Corneille (1503) and Racine (1506), but poetry other than dramatic declined, with a single notable exception.

Queen of the Letter-writers

In one quarter the lighter forms of verse gained a hearing. At the salons, chief among which was the famous Hôtel de Rambouillet, men of letters met men and women of rank and breeding on an easy and familiar footing. These gatherings gave rise to an immense amount of refined and elegant writing, in the shape of gossipy *ana* memoirs, and occasional verse, and this habit of occasional verse-making in turn suggested the inimitable "Fables" of La Fontaine (1551), which is perhaps the best-known and most universally popular of all French books. In the writing of memoirs the age excelled, and of the letter-writers, Madame de Sévigné (1574), with her unflinching charm, remains the undisputed queen.

Creator of Modern French Prose

The creator of modern French prose was Jean Guez de Balzac (1594-1654). Fascinating as is the prose of Montaigne and other great writers of his period, the charm is one which

more properly belongs to verse. The matter of Balzac's writings was of little value, but their manner was all-important. In place of diffuseness and formlessness Balzac inaugurated the well-balanced, cadenced sentence and paragraph, and by his masterly use of the native idiom he ensured the development of the literary language along national lines. What Malherbe had done imperfectly for French poetry, Balzac performed with the utmost thoroughness and precision for French prose.

La Rochefoucauld's "Maximes"

At a time when political and religious speculation was dangerous, when such writers as Montaigne were widely read, and when the language had been fitted for epigrammatic concision, it was to be expected that the writing of moral reflections should flourish. In this field La Rochefoucauld (1551) is supreme. The author of the "Maximes et Sentences" never uses a word too many or a word too few to express his meaning, and his excellences of both form and thought had a wide and enduring effect on French literature.

FRENCH LITERATURE (18TH CENTURY)

The changes that followed the death of Louis XIV soon manifested themselves in the national literature. The taste for pure literature died down and was replaced by a general spirit of unrest and inquiry. Literature came to be regarded rather as a means of disseminating ideas, and began to flow in propagandist channels. The way had been pointed out by Pierre Bayle (1519) in his great dictionary, which, with its ill-digested mass of philosophy and scepticism, was the connecting-link between Montaigne and Voltaire and the forerunner of the Encyclopédie. Admiration for the English constitution and for English political theories was imported by Voltaire and Montesquieu (1559), and on all sides English ideas were hailed with delight.

The Great French Encyclopédie

The spirit of the 18th century is typified by Voltaire (1003). Although he excelled in every kind of literary composition, it was as the superlatively witty and untiring enemy of oppression rather than through his literary excellences that his influence was felt. In him the critical and destructive forces of the age were incarnate.

The great French Encyclopédie, one of the most important literary productions of the century, was brought out by Diderot (1532), who himself wrote many of the articles. Other contributors included Voltaire, Rousseau, and Montesquieu. It had an immense share in

diffusing general knowledge, but, over and above its literary significance, no encyclopædia has ever exerted so profound a political and theological influence, for it sought to guide opinion as well as to provide information.

Jean Jacques Rousseau

But the greatest name in 18th-century French literature is that of Jean Jacques Rousseau (1571). Whereas Voltaire desired to utilize the powers of despotism to bring about reform, Rousseau proclaimed the theory of the sovereignty of the people and the social contract, by which all government should be based on the consent of the governed. Rousseau was the direct precursor of the French Revolution, and his powers of describing the beauties of nature and the passions of the human heart were the seeds of the romantic revival in literature, which, delayed in France by the Revolution, was ultimately to burst into bloom in the first quarter of the 19th century.

Literature of the Revolutionary Period

Although the literature of the revolutionary period was largely made up of journalism and political eloquence, two writers emerged who had a powerful effect on the course that literature was soon to take. Madame de Staël (1576), although in a measure she carried on the traditions of the 18th century, contributed to the liberalizing side of the coming movement by introducing the cosmopolitan spirit. She knew other countries besides her own, and by her book, "De l'Allemagne," she made known to her countrymen the hitherto undiscovered treasures of German literature.

The Father of Romanticism

The other writer, Chateaubriand (1528), had far greater influence, and has been called by the critic, Émile Faguet, "the father of romanticism and of almost all the forms of literary art in the 19th century." With a mastery of a magnificent style Chateaubriand combined a vivid imagination and a fervent love of nature, and with his glowing "Génie du Christianisme" and "Les Martyrs," in which he set up Christianity once more as an inspiring literary force instead of a subject of ridicule, this eloquent disciple of Rousseau marked the transition from the old classical to the new romantic school.

Lamartine's Verse

In poetry the change was heralded by Lamartine (1551), who may be called the Chateaubriand of verse. But Lamartine had not entirely shaken off the fetters of classicism. His harmonies betray the old besetting sin of

monotony. The break was accomplished by bolder spirits.

The French Romantic School

The romantic school was formed in 1824 by the little clique of men of letters of which Victor Hugo (695) was the outstanding figure. Hugo defined romanticism as "liberalism in literature," and as the political revolution established the principles of freedom and individuality, so the literary revolution swept away all arbitrary restraints and allowed the author to be a law to himself. Poetry, so long almost confined to drama, was born again, and other forms of composition were enabled to arrive at the perfection that we see to-day. In spite of later developments and seeming reactions all the exquisite literary work achieved by French writers since the break with the old traditions has been coloured in varying degrees by the results of the literary revolution of 1824.

EARLY GERMAN LITERATURE

When Madame de Staël (1576) introduced her countrymen to German literature she introduced them to a literature which in the course of its history had encountered unusual obstacles to healthy progress, for it was not until the middle of the 18th century that the German language became sufficiently stabilized to produce a literature that could hold its own with those of other nations. The great philosopher, Leibnitz, whose life extended sixteen years into the 18th century, characterized his own tongue as "barbarous," and wrote in Latin or even in French.

Among the early German epics the first place must be given to the "Nibelungenlied," or "Song of the Nibelungs," which received its present form at the hands of an Austrian poet either late in the 12th century or early in the 13th. It deals with dramatic intensity with the Siegfried (Sigurd) legend, which here is handled in less primitive fashion than in the Icelandic Volsunga Saga, from which William Morris (1559) embroidered his "Sigurd the Volsung." Another notable epic is "Gudrun," which was composed a little later than the "Nibelungenlied," and which forms part of a cycle of sagas hailing from the North Sea shores.

The Minnesingers

As France had her troubadours, so Germany had her minnesingers, the name given to the German lyric poets of the 12th and 13th centuries. Like the troubadours, the minnesingers sang not only of love (*minne*), but also of religion, politics, and heroic deeds. Although some of the troubadour characteristics were

absorbed by the minnesingers, the art of the latter seems to have been in great measure a spontaneous expression of the German lyrical spirit. The most famous of the minnesingers was Walther von der Vogelweide (1586).

The Meistersingers

With the rise and growth of the middle class the spirit of chivalry, which had animated the minnesingers, declined, and lyric poetry gradually fell into the hands of the burghers. The place of the minnesingers was taken by the meistersingers (master singers), who mostly belonged to the trading classes, and who carried on the old traditions, though in a very different spirit. The meistersingers formed themselves into guilds in Mainz, Würzburg, Nuremberg, and other towns. Under them poetry became a more or less mechanical art, and the prizes offered at the periodical singing contests went to the burgher poets who displayed the greatest ingenuity and the most intimate knowledge of the rules. In spite of its obvious defects, the cult of the meistersingers betokened a healthy civic life, and in the person of the Nuremberg cobbler, Hans Sachs (1571), the champion of Luther, it produced an inspired and very fertile writer of poetry, stories, and plays.

Satire and the Reformation

During the 15th and 16th centuries the story dealing either in comic or didactic fashion with the lives of the common people formed a large part of the literary fare. This, as well as the beast fable, developed into a powerful organ of satire, as in the "Narrenschiff" (Ship of Fools) of Sebastian Brant (1457-1521), which by its unsparing criticism of the times was a harbinger of the Reformation. Besides being the age of the Reformation, the 16th century witnessed a remarkable revival of popular lyric poetry, which both in quality and volume reached a stage never before or since attained.

The German that Luther Wrote

Although he cannot be regarded as the father of the modern German literary language, Luther (1554) forms an important link in the chain of development. Based on the language of the Saxon chancery, German as Luther wrote it was a skillfully selected compromise between the dialects of the north and the south, and its diffusion was limited by that of the great reformer's influence. Not only the language but literary methods also were to undergo many changes before they attained the form that we now know.

In the 17th century German literature, hitherto so full of promise, fell on evil days. The early crusading spirit of the Lutheran

Reformation gave place to an arid and stifling orthodoxy, humanism degenerated into a dull pedantry, which was not dispelled until the arrival of Leibnitz, and the horrors and exhaustion of the Thirty Years' War effectively arrested any kind of healthy development. With few and unimportant exceptions, German literature came completely under the sway of foreign models.

Poetry without Inspiration

What Ronsard (1570) had done for French literature, Martin Opitz (1624), who was crowned laureate by the Emperor Ferdinand II, proceeded to carry out for German literature, but without Ronsard's inspiration. Having studied every form of Renaissance poetry, he produced a mass of formal verse on carefully considered themes and almost entirely devoid of charm or genuine feeling. For a century German verse was regulated in accordance with his "Buch von der deutschen Poeterey" (1624), in which he laid down the rules to be applied to language, style, and form.

After a short lived reaction, represented by a bombastic school of writers opposed to the tenets of Opitz, J. C. Gottsched (1700-86) attempted to reform German letters according to the principles of Boileau. The rules laid down by Gottsched in his "Kritische Dichtkunst" (1730) undoubtedly did much to correct extravagance and to purify the language and literary style, but this Leipzig professor's hide-bound devotion to French pseudo classicism was out of place in an age in which what literature needed, above all things, was much greater freedom.

The "Storm and Stress" Movement

A conflict between the old and the new principles ensued. Among Gottsched's most determined opponents were the Swiss writers, J. J. Bodmer (1698-1783) and J. J. Brechtling (1701-76), who based their claims for freedom from artificial rules on Milton and other great English poets. Some even of Gottsched's own disciples banded together and endeavoured to infuse a new spirit into their writings. The battle was won in 1748, when the first part of F. G. Klopstock's "Messias" appeared (1550). Based on Milton's "Paradise Lost," this magnificent sacred epic was the embodiment of the new Swiss theories, and broke every one of Gottsched's carefully prepared rules. It was the first inspired German poetry since the days of Hans Sachs.

By his unyielding allegiance to ancient Greek culture and to Shakespeare Lessing (1552) did good service in exposing the folly of imitating French writers. The German imagination,

too, was materially deepened by the influence of Christoph Wieland (1733-1813) (1589), who leavened Klopstock's pietism with the more light-hearted philosophy of southern Europe.

A still more important work was accomplished by J. G. Herder (1744-1803). His aim was to nationalize German poetry and to free it from all foreign influences. He was a fervent admirer of Shakespeare's genius, but whereas Lessing regarded Shakespeare as an exponent of classical principles, Herder (1545) emphasized his Teutonic character. His researches into the history of primitive peoples drew attention to the beauties of the old national poetry of Germany, which had so long lain neglected as being unclassical. In thus turning from classicism Herder became one of the leaders of what, from its violently revolutionary elements, came to be known as the *Sturm und Drang* (storm and stress) movement.

Goethe's Domination

One of the earliest and most influential exponents of *Sturm und Drang* was the youthful Goethe (193, 61), who had been initiated into the new ideas by Herder. Goethe's drama, *Gotz von Berlichingen*, and his sentimental novel, "Werther," are typical products of the movement, and the same may be said of Schiller's early plays (193-196) and of the humorous, imaginative, but irregularly constructed works of Jean Paul Richter (1570). But the movement was essentially iconoclastic, and its force was soon spent. Goethe's Italian journey revealed to him his true mission. He returned from Italy in 1788 with a new philosophy of art and life, and for nearly twenty years German literature was dominated by his ideals. The years of the close friendship of Goethe (193, 61) and Schiller, which lasted from 1794 until 1805, mark the culminating and most vigorous period of 18th-century classicism, a classicism in which the old Greek spirit was triumphant.

The German Romantic School

This 18th-century classicism was seen in its highest excellence in the writings of Goethe and Schiller, but during the lifetime of both a reaction had already set in, and in 1798 the romantic school was founded by the two brothers, A. W. and F. Schlegel (1573), the former of whom was an intimate friend of Madame de Staël. The delight in the unsubstantial land of faery displayed by the early romantics, such as Ludwig Tieck (1580) and Novalis (F. von Hardenberg) (1581), was succeeded by a more practical study of the Middle Ages, and by a heightening of the national pride, but the July revolution of 1830 gave the death-blow to romanticism. Although Heine's

early work is deeply tinged with the romantic traditions, this supremely gifted lyric poet (1544) threw in his fortunes with the party of "Young Germany," in which poetic feeling was subordinated to politics, and this political spirit remained in evidence until after the revolution of 1848.

Mid-nineteenth-century German literature took its complexion from the philosophic pessimism of Schopenhauer (1573). By the close of the century, however, as the younger generation of the united German empire grew up, this gloomy and desponding attitude found less acceptance, and gave place to what seemed to be a more bracing view of life.

Nietzsche and Treitschke

The most complete embodiment of the spirit of the age was Friedrich Nietzsche (1561), the apostle of the "superman." A determined champion of the rights and power of the individual, despising morality and humanitarianism, and glorying in struggle and war, Nietzsche looked forward to a time when the human race should throw off its effete and enervating culture and emerge afresh clothed only with primitive instincts. The historian, Heinrich Treitschke (1581), on the other hand, regarded the individual merely as the blindly obedient servant of the state. To his thinking, the essence of the state was power. In the lecture-rooms of Berlin he taught for fifteen years that Germany must dominate Europe, and that Germany must gain the predominant position by enlarging her boundaries by war. To what a pass such dangerous though conflicting opinions were to bring Germany was made clear by her subsequent history.

THE INNER MEANING OF LITERATURE

Anything approaching a comprehensive survey of the literature of the world would fill several volumes, but enough has perhaps been said to show broadly how a literature proceeds through its various stages from infancy to maturity, and how some of the great writers of different ages and countries have contributed to this end. Of the features that stand out clearly the most striking is the peculiar excellence of the classic literature of Greece—a superiority which became increasingly apparent at the Renaissance, when the nations one after the other sought to recapture the old Greek spirit. Another is the lamentable effect produced by pseudo-classicism—the borrowed classicism of the Romans.

Yet another point emerges, though not so prominently, and that is that all literature subsequent to that of ancient Greece is, broadly speaking, derivative. When this derivative-

ness becomes mere slavish imitation the literature languishes ; when it is regulated by virile genius the literature flourishes. Boccaccio, the father of Italian prose, admittedly took many of his stories from the French *fabliaux* but, having passed through the crucible of his mighty mind, these became independent creations of genius. The same is true of literary style. When that exquisite craftsman, R. L. Stevenson, "played the sedulous ape," as he observed, to the masters of prose he admired,

he was not bent upon copying their style but on forming his own.

Thus, borrowing here and there, literature has come down to us through the ages from its Asiatic cradle-land. What has been found worthy has been cherished, and what has been proved to be unworthy has been discarded. The result is that when we speak of literature we do not mean every book that has been written, but those books only that contain the best expression of the best thought.

ENGLISH AND FRENCH CONTEMPORARY AUTHORS

<i>English.</i>	<i>Representative Work.</i>	<i>French.</i>	<i>Representative Work.</i>
CÆDMON (died 675 ?)	Metrical versions of Scripture history		
BEDE (672 ?-735)	Ecclesiastical History		
ALFRED THE GREAT (849-901)	Anglo-Saxon Chronicle (part)	VILLEHARDOUIN, GEOFFROY DE (1160 ?-1213 ?)	Conquête de Constantinople
BARBOUR, JOHN (1316 ?-95)	The Brus (Bruce)		
WYCLIFFE, JOHN (1320 ?-84)	Translation of the Bible		
LANGLAND, WILLIAM (1330 ?-1400 ?)	Vision of Piers Plow-		
CHAUCER (1340 ?-1400)	Canterbury Tales	FROISSART (1338-1410)	Chronicle
		GERSON, J. C. DE (1363-1429)	Consolation of Theology
		ORLÉANS, CHARLES D' (1391-1465)	Rondels and ballades
PECOCK, REGINALD (1395 ?-1460 ?)	Repressor of Overmuch Weeting [blaming] of the Clergie		
GOWER, JOHN (died 1408)	Confessio Amantis		
CAXTON, WILLIAM (1422 ?-91)	Lives of the Fathers	VILLON, FRANÇOIS (1431 ?-85 ?)	Petit Testament
		COMINES, PHILIPPE DE (1445 ?-1511 ?)	Memoirs
BERNERS, LORD (1469-1533)	Translation of Froissart		
MALORY, SIR THOMAS (died 1470)	Morte d'Arthur		
MORE, SIR THOMAS (1478-1535)	Utopia		
TYNDALE, WILLIAM (1480-1536)	Translation of the Bible		
COVERDALE, MILES (1488 ?-1569)	Translation of the Bible	MARGARET OF VALOIS (1492-1549)	The Heptameron
		MAROT, CLÉMENT (1496-1544)	Light verse
WYAT, SIR THOMAS (1503-42)	Poems		
SURREY, HENRY HOWARD, EARL OF (died 1547)	Poems	RABELAIS, FRANÇOIS (died 1553)	Gargantua and Pantagruel
		CALVIN, JOHN (1509-64)	Institution of the Christian Religion

English and French Contemporary Authors (*contd.*)

<i>English.</i>	<i>Representative Work.</i>	<i>French.</i>	<i>Representative Work.</i>
ASCHAM, ROGER (1515 ?-68) FOXE, JOHN (1516-87)	The Schoolmaster Book of Martyrs	ROUSSEAU, PIERRE DE (1524-85)	Amatory verse and descriptions of the country Antiquités de Rome
DORSET, THOMAS SACKVILLE, EARL OF (1530-1608)	A Mirror for Ma- gistrates (part author)	BELLAY, JOACHIM DU (1525 ?-60) BODIN, JEAN (1530-96)	La République
GAZCOIGNE, GEORGE (1536-77)	The Pleasauntest Works	MONTAIGNE, MICHEL DE (1533-92)	Essays
SPENSER, EDMUND (1552 ?-99)	Faerie Queene	FRANCIS OF SALES, ST. (died 1622) AUBIGNÉ, T. A. D' (1552-1630)	Introduction to a Devout Life Histoire Universelle
LYLY, JOHN (1553 ?-1606)	Euphues: The An- atomy of Wit	MALHERBE, FRANÇOIS DE (1556-1628)	Consolation à Duper- ier
HOOKE, RICHARD (1553-1600)	Laws of Ecclesiasti- cal Polity		
SIDNEY, SIR PHILIP (1554-86)	Arcadia		
PEELE, GEORGE (1558 ?-98)	The Old Wives' Tale		
MARLOWE, CHRISTOPHER (1564-93)	Tamburlaine		
LODGE, THOMAS (1558 ?-1625)	Reply to the Schoole of Abuse		
BACON, FRANCIS (1561-1626)	Essays		
SHAKESPEARE (1564-1616)	Hamlet		
DRAYTON, MICHAEL (1563-1631)	Polyolbion		
JONSON, BEN (1573 ?-1637)	Every Man in his Humour	URFÉ, HONORÉ D' (1568-1625)	Astrée
DONNE, JOHN (1573-1631)	The Pseudo-Martyr		
TOURNEUR, CYRIL (1575-1626)	Laugh and Lie Down		
BURTON, ROBERT (1576-1640)	Anatomy of Melan- choly		
WEBSTER, JOHN (1580-1625)	The Famous History of Sir Thomas Wyat		
HOBBS, THOMAS (1588-1679)	Leviathan		
HERRICK, ROBERT (1591-1634)	Hesperides		
HERRERT, GEORGE (1593-1633)	The Country Parson		
WALTON, IZAAK (1593-1683)	Compleat Angler	BALZAC, JEAN GUEZ DE (1594-1654) DESCARTES, RENÉ (1596-1650)	Letters Discourse of Method
WALLER, EDMUND (1605-87)	To the Sun		
BROWNE, SIR THOMAS (1606-82)	Religio Medici	SCUDÉRY, MADELINE DE (1607-1701)	The Grand Cyrus
DAVENANT, SIR WILLIAM (1606-68)	The Wits		

Black figures denote pages where further information is given

English and French Contemporary Authors (*contd.*)

<i>English.</i>	<i>Representative Work.</i>	<i>French.</i>	<i>Representative Work.</i>
FULLER, THOMAS (1608-61) MILTON, JOHN (1608-74) SUCKLING, SIR JOHN (1609-42) CLARENDON, EARL OF (1609-74)	Worthies of England Paradise Lost Ballad upon a Wedding History of the Rebellion	SCARRON, PAUL (1610-80) SAINT-ÉVREMOND, CHARLES DE ST. DENIS DE (1610-1703)	Roman Comique La Comédie des Académiciens
URQUHART, SIR THOMAS (1611-60) BUTLER, SAMUEL (1612-80) CRASHAW, RICHARD (1613-50) TAYLOR, JEREMY (1613-87)	Translation of Rabelais Hudibras Steps to the Temple Holy Living and Dying	LA ROCHEFOUCAULD (1613-80) RETZ, CARDINAL DE (1614-79)	Maximes et Sentences Memoirs
BAXTER, RICHARD (1615-91) LOVELACE, RICHARD (1618-58) COWLEY, ABRAHAM (1618-67)	The Sainte' Everlasting Rest Lucasta Poetical Blossoms	BERGERAC, CYRANO DE (1619-55)	Histoires Comiques
EVELYN, JOHN (1620-1706) MARVELL, ANDREW (1621-78)	Diary Mr. Smirke	LA FONTAINE, JEAN DE (1621-95) PASCAL, BLAISE (1623-62)	Fables Pensées
FOX, GEORGE (1624-91)	Journal	SÉVIGNÉ, MADAME DE (1626-96) BOSSUET, J. B. (1627-1704)	Letters Oraisons Funébres
BUNYAN, JOHN (1628-88) DRYDEN, JOHN (1631-1700) LOCKE, JOHN (1632-1704) PEPYS, SAMUEL (1633-1703)	Pilgrim's Progress Absalom and Achitophel Essay Concerning the Human Understanding Diary	PERRAULT, CHARLES (1628-1703) BOURDALOUE, LOUIS (1632-1704)	Fairy tales Sermons
BEHN, APHRA (1640-89) WYCHERLEY, WILLIAM (1640-1716)	Plays and Novels Love in a Wood	LA FAYETTE, MADAME DE (1634-92) BOILEAU, NICOLAS (1636-1711) MAIEBRANCHE, NICOLAS (1638-1715)	La Princesse de Clèves L'Art Poétique De la Recherche de la Vérité
DEFOR, DANIEL (1659 ?-1731)	Robinson Crusoe	BAYLE, PIERRE (1647-1706) FÉNELON, FRANÇOIS DE (1651-1716)	Dictionnaire Historique et Critique Télémaque
PRIOR, MATTHEW (1664-1721) SWIFT, JONATHAN (1667-1745)	The City and Country Mouse Gulliver's Travels	RAPIN, PAUL (1661-1725) ROLLIN, CHARLES (1661-1741) LE SAGE, A. R. (1668-1747)	L'Histoire d'Angleterre Ancient History Gil Blas

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English and French Contemporary Authors (*contd.*)

<i>English</i>	<i>Representative Work</i>	<i>French.</i>	<i>Representative Work.</i>
ADDISON, JOSEPH (1672-1719) STEELE, SIR RICHARD (1672-1729)	Essays Essays	SAINT SIMON, DUC DE (1675-1755)	Mémoires
BOILINGBROKE, LORD (1678-1751)	Letters on the Study of History		
BERKLEY, GEORGE (1685-1753)	The Principles of Human Know- ledge		
RAMSAY, ALLAN (1686-1758)	The Gentle Shepherd		
POPE, ALEXANDER (1688-1744)	Essay on Criticism		
MONTAGU, LADY MARY WORTHLEY (1689-1762)	Letters	MONTESQUIEU (1689-1755)	L'Esprit des Loix
RICHARDSON, SAMUEL (1689-1761)	Pamela		
BUTLER, JOSEPH (1692-1752)	The Analogy of Religion		
CHISTERSFIELD, LORD (1694-1773)	Letters to his Son	VOLTAIRE (1694-1778)	Candide
		PRÉVOST, L'ABBÉ (1697-1763)	Manon Lescaut
		DEFFAND, MADAME DU (1697-1780)	Letters
THOMSON, JAMES (1700-48)	The Seasons		
FIELDING, HENRY (1707-54)	The History of Tom Jones	BUFFON (1707-88)	Natural History
JOHNSON, SAMUEL (1709-84)	Dictionary		
HUME, DAVID (1711-76)	Inquiry Concerning Human Under- standing		
STERNE, LAURENCE (1713-68)	Tristram Shandy	ROUSSEAU, J. J. (1712-78)	La Nouvelle Héloïse
SHENSTONE, WILLIAM (1714-63)	Poems upon Several Occasions	DIDEROT, DENIS (1713-84)	The Encyclopædia
GRAY, THOMAS (1716-71)	Elegy in a Country Churchyard	HELVETIUS, C. A. (1715-71)	De l'Esprit
WALPOLE, HORACE (1717-87)	Letters	ALEMBERT, JEAN LE ROND D' (1717-83)	Éléments de Philo- sophie
WHITE, GILBERT (1720-93)	Natural History and Antiquities of Selborne		
SNOLLETT, TOBIAS (1721-71)	Adventures of Rod- erick Random		
ROBERTSON, WILLIAM (1721-93)	Reign of the Em- peror Charles V		
COLLINS, WILLIAM (1721-59)	Persian Eclogues		
WARTON, JOSEPH (1722-1800)	Odes on Several Subjects		
SMITH, ADAM (1723-90)	Wealth of Nations		
WARTON, THOMAS (1728-90)	The Pleasures of Melancholy		
GOLDSMITH, OLIVER (1728-74)	Vicar of Wakefield		
BURKE, EDMUND (1729-97)	A Vindication of Natural Society		

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English and French Contemporary Authors (*contd.*)

<i>English.</i>	<i>Representative Work.</i>	<i>French.</i>	<i>Representative Work.</i>
PERCY, THOMAS (1729-1811)	Reliques of Ancient English Poetry		
COWPER, WILLIAM (1731-1800)	John Gilpin		
GIBBON, EDWARD (1734-94)	Decline and Fall of the Roman Empire		
BRATTLE, JAMES (1735-1803)	The Minstrel		
MACPHERSON, JAMES (1736-96)	Translation (f) of Ossian		
BOSWELL, JAMES (1740-95)	Life of Dr. Johnson	SAINT-PIERRE, BERNARDIN DE (1737-1814)	Paul et Virginie
YOUNG, ARTHUR (1741-1820)	Travels in France		
MITFORD, WILLIAM (1744-1827)	History of Greece		
BENTHAM, JEREMY (1748-1832)	A Fragment on Government		
CHATTERTON, THOMAS (1752-70)	The Rowley Poems		
BURNEY, FANNY (1752-1840)	Evelina		
CRABBE, GEORGE (1754-1832)	Tales of the Hall		
BLAKE, WILLIAM (1757-1827)	Songs of Innocence		
BURNS, ROBERT (1759-96)	To a Mouse		
BECKFORD, W. (1760-1844)	Vathek	LISLE, J. ROUGET DE (1760-1836)	La Marseillaise
ROGERS, SAMUEL (1763-1855)	The Pleasures of Memory		
RADCLIFFE, ANN (1764-1823)	The Sicilian Romance	STALL, MADAME DE (1766-1817)	De l'Allemagne
		CHATEAUBRIAND (1768-1848)	Génie du Christianisme
EDGEWORTH, MARIA (1767-1849)	Castle Rackrent		
WORDSWORTH, WILLIAM (1770-1850)	The Excursion		
HOGG, JAMES (1770-1835)	The Mountain Bard		
SCOTT, SIR WALTER (1771-1832)	Waverley Novels		
SMITH, SYDNEY (1771-1845)	Sermons		
LINGARD, JOHN (1771-1851)	History of England		
COLERIDGE, S. T. (1772-1834)	The Ancient Mariner	SISMONDI, J. C. L. DE (1773-1842)	Histoire des Français
SOUTHEY, ROBERT (1774-1843)	Poems		
AUSTEN, JANE (1775-1817)	Pride and Prejudice		
LAMB, CHARLES (1775-1834)	Essays		
LEWIS, M. G. ("Monk" Lewis) (1775-1818)	The Monk		
LANDOR, WALTER SAVAGE (1775-1864)	Imaginary Conversations		
CAMPBELL, THOMAS (1777-1844)	Poems		
HALLAM, HENRY (1777-1859)	Europe during the Middle Ages		
HAZLITT, WILLIAM (1778-1830)	The Spirit of the Age		

English and French Contemporary Authors (*contd.*)

<i>English.</i>	<i>Representative Work</i>	<i>French.</i>	<i>Representative Work.</i>
MOORE, THOMAS (1779-1852)	Lalla Rookh	NODIER, CHARLES (1780-1844) BERANGER, P. J. DE (1780-1857) STENDHAL (M. H. BEYLE) (1783-1842)	Le Peintre de Salz- bourg Le Roi d'Yvetot La Chartreuse de Parme
HUNT, LEIGH (1784-1859)	Men, Women, and Books		
WILSON, JOHN ("Christopher North") (1785-1854)	Noctes Ambrosianae		
DE QUINCY, THOMAS (1785-1859)	Essays		
PFAFF, THOMAS LOVE (1785-1866)	Nightmare Abbey		
MITFORD, MARY RUSSELL (1786-1855)	Our Village	GUIZOT, F. P. G. (1787-1874)	Histoire de la Civilis- ation en Europe
BYRON (1788-1824)	Don Juan		
HOOK, THEODORE (1788-1841)	Maxwell	LAMARTINE (1790-1869)	Meditations
MILMAN, H. H. (1791-1868)	History of Latin Christianity	COUSIN, VICTOR (1792-1867)	Cours de l'Histoire de la Philosophie
SHELLEY (1792-1822)	Ode to the West Wind		
MARRYAT, FREDERICK (1792-1848)	Mr Midshipman Easy	KOCK, PAUL DE (1794-1871)	Le Barbier de Paris
LOCKHART, J. G. (1794-1854)	Life of Scott		
GROTE, GEORGE (1794-1871)	History of Greece		
KFAIS (1795-1821)	To a Nightingale		
CARLYLE, THOMAS (1795-1881)	French Revolution	MIGNET, FRANÇOIS (1796-1884) THIERS ADOLPHE (1797-1877)	History of the French Revolution History of the Con- sulate and the Empire Cinq Mars
COLEFRIDGE, HARTLEY (1796-1849)	Worthies of York- shire and Lan- cashire	VIGNY, ALFRED DE (1797-1863) MICHELLE, JULES (1798-1874)	History of the French Revolution Comédie Humaine
HOOD, THOMAS (1799-1845)	Song of the Shirt	BAIFAC, HONORI DE (1799-1850)	
MACALLAN (1800-59)	Essays	HUGO VICTOR (1802-85)	Les Misérables
NEWMAN, JOHN HENRY (1801-90)	Apologia pro Vita Sua	DUMAS, ALEXANDRE (1802-70)	The Three Musket- eers
PRID, WINTHROP MACK- WORTH (1802-39)	The Vicar	MARIMBLE, PROSPER (1803-70)	Colomba
MARINER, HARRIET (1802-76)	History of the Peace		
JERROLD, DOUGLAS (1803-57)	Mrs Caudle's Cur- tain Lectures	SUE, EUGENE (1804-57)	The Wandering Jew
BULWER LYTTON (1803-73)	Eugene Aram	SAND, GEORGE (1804-76)	Consuelo
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AINSWORTH, HARRISON (1805-82)	Old St. Paul's		
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BROWNING, ELIZABETH BAR- RETT (1806-61)	Sonnets from the Portuguese		

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English and French Contemporary Authors (*contd.*)

<i>English.</i>	<i>Representative Work.</i>	<i>French.</i>	<i>Representative Work.</i>
TENNYSON (1809-92)	Idylls of the King		
FITZGERALD, EDWARD (1809-83)	Translation of Omar Khayyám		
GASKELL, ELIZABETH (1810-65)	Cranford	MUSSET, ALFRED DE (1810-57)	Nouvelles
BROWN, JOHN (1810-82)	Rab and His Friends		
THACKERAY, W. M. (1811-63)	Vanity Fair	GAUTIER, THÉOPHILE (1811-72)	Le Capitaine Fracasse
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DICKENS, CHARLES (1812-70)	Pickwick Papers		
BRONTË, CHARLOTTE (1816-55)	Jane Eyre		
BRONTË, EMILY (1818-48)	Wuthering Heights		
TROLLOPE, ANTHONY (1815-82)	Barchester Towers		
READE, CHARLES (1814-84)	The Cloister and the Hearth		
ELIOT, GEORGE (1819-80)	Silas Marner		
KINGSLEY, CHARLES (1819-75)	Westward Ho!		
RUSKIN, JOHN (1819-1900)	The Stones of Venice		
CLOUGH, ARTHUR HUGH (1819-61)	Dipsychus		
FROUDE, J. A. (1818-84)	Short Studies on Great Subjects		
SPENCER, HERBERT (1820-1903)	Synthetic Philosophy	BAUDELAIRE, CHARLES (1821-67)	Petits Poèmes en Prose
BUCKLE, H. T. (1821-62)	History of Civilization in England	FLAUBERT, GUSTAVE (1821-80)	Madame Bovary
		AMIEL, H. F. (1821-81)	Journal Intime
ARNOLD, MATTHEW (1822-88)	Literature and Dogma		
FREEMAN, E. A. (1823-92)	Growth of the English Constitution	RENAN, ERNEST (1823-92)	Life of Jesus
PATMORE, COVENTRY (1823-96)	The Angel in the House		
COLLINS, WILKIE (1824-89)	The Woman in White	DUMAS FILS, ALEXANDRE (1824-95)	La Dame aux Camélias
BAGEHOT, WALTER (1826-77)	The English Constitution		
ROSSETTI, D. G. (1828-82)	The Blessed Damsel	TAINÉ, H. A. (1828-93)	Origines de la France Contemporaine
MEREDITH, GEORGE (1828-1909)	The Egoist		
ROSSETTI, CHRISTINA (1830-94)	Sing-Song		
KINGSLEY, HENRY (1830-76)	Ravenshoe		
BRYCE, LORD (1838-1922)	The Holy Roman Empire		
MORRIS, WILLIAM (1834-96)	The Earthly Paradise		
BESANT, SIR WALTER (1836-1901)	All Sorts and Conditions of Men		
SWINBURNE, A. C. (1837-1909)	Songs before Sunrise		
GREEN, J. R. (1837-83)	History of the English People		
LECKY, W. E. H. (1838-1903)	History of European Morals		

Black figures denote pages where further information is given

English and French Contemporary Authors (*contd.*)

<i>English.</i>	<i>Representative Work</i>	<i>French.</i>	<i>Representative Work.</i>
MORLEY, LORD (1838-1923)	Life of Gladstone	PARIS, GASTON (1839-1903)	La Poésie du Moyen Age
PATER, WAITER (1839-94)	Imaginary Portraits		
DE MORGAN, W. F. (1839-1917)	Joseph Vance		
HARDY, THOMAS (born 1840)	Tess of the D'Urbervilles	DAUDET, ALPHONSE (1840-97)	Tartarin
		ZOLA, ÉMILE (1840-1902)	L'Assommoir
		MÉNÈS, CATULLE (1841-1909)	Le Roi Vierge
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		COCTEAU, FRANÇOIS (1842-1908)	Contes et Vers
JAMES, HENRY (1843-1916)	Daisy Miller	VERRAINE, PAUL (1844-96)	Poèmes Saturniens
LANCÉ, ANDREW (1844-1912)	Ballads in Blue China	FRANCE, ANATOLE (J. A. Thibault) (1844-1924)	L'Île des Pingouins
BRIDGES, ROBERT (born 1844)	Prometheus		
JENNINGS, RICHARD (1848-97)	Wild Life	FAGUET, ÉMILE (1847-1916)	History of French Literature
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		LOTE, PIERRE (JULIEN VIAUD) (1850-1923)	Madame Chrysanthème
WARD, MRS. HUMPHRY (1851-1920)	Robert Elsmere		
HUDSON, W. H. (1851-1922)	Green Mansions	JUSSERAND, J. A. (born 1855)	English Wayfaring Life in the Middle Ages
CARLE, SIR HALL (born 1853)	The Mannaman		
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DAVIDSON, JOHN (1857-1909)	Bruce		
GISSING, G. R. (1857-1903)	The New Grub Street		
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THOMPSON, FRANCIS (1859-1907)	The Hound of Heaven		
CONRAD, JOSEPH (1857-1924)	Almayer's Folly		
HOUSMAN, A. F. (born 1859)	A Shropshire Lad		
HARRIS, SIR JAMES (born 1860)	Peter Pan	PRÉVOST, MARCEL (born 1862)	L'Heureux Ménage
KIPPING, RICHARD (born 1864)	The Jungle Book		
YEATS, W. B. (born 1865)	The Land of Heart's Desire		
WELLS, H. G. (born 1866)	Mr. Bunting Sees It Through		
BENNETT, ARNOLD (born 1867)	The Old Wives' Tale		
GAISWORTHY, JOHN (born 1867)	The Man of Property		
LUCAS, E. V. (born 1868)	The Open Road		
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Books for the Student of Literature

An Introduction to the Study of Literature W H Hudson
Studies in Literature Edward Dowden
Transcripts and Studies Edward Dowden
Introduction to the Literature of Europe Henry Hallam
Main Currents in 19th-Century Literature G Brandes
Essays in Criticism Matthew Arnold
Familiar Studies of Men and Books B L Stevenson
Critical Kit-Kats Edmund Gosse
English Literature and the Classics G E Gordon and others
History of Fiction J C Dunlop
The Making of English Literature W H Cresswell
A First Sketch of English Literature Henry Morley
A Short History of English Literature G Saintsbury
The Story of English Literature Anna Ruckland
The Cambridge History of English Literature Edited by A W
Ward and A R Waller
Illustrated Record of English Literature Richard Garnett and
Edmund Gosse
English Literature to the Norman Conquest Stopford A Brooke
English Literature from the Norman Conquest to Chaucer W H
Stichard
Modern English Literature from Chaucer to the Present Day
G H Mair
English Literature: Medieval W P Kerr
Literary Relations of England and Germany in the 16th Century
C H Merford
The Age of Shakespeare T Beconcombe and J W Allen
The Later Renaissance D Hannay
The Augustan Age O Riton
A Survey of English Literature, 1780-1830 O Elton
17th Century Studies Edmund Gosse
The Age of Johnson T Beconcombe
The Age of Dryden R Garnett
History of 18th-Century Literature Edmund Gosse
English Literature and Society in the 18th Century Ivalie Stephen
History of English Thought in the 18th Century Leslie Stephen
Hours in a Library Ivalie Stephen
History of English Romanticism in the 18th Century H A Beer
History of English Romanticism in the 19th Century H A Beer
Victorian Poets I C Steadman
History of Modern English Literature Edmund Gosse
History of English Poetry W J Courthope
The English Novel Sir Walter Raleigh
Literary History of the English People I J Jassonard
A Literary History of Scotland J H Muller
The Literature of the Highlands Magnus Muckean
Text Book of Irish Literature Hannon Mull
History of Irish Literature D Hyde
Literature of the Kynry T Stephens
Sweet Songs of Wales E Brett Lewis
Handbook of Canadian Literature A McMurchy
History of American Literature W P Trent
A Literary History of America B Wendell
American Literature A J Bates
American Prose Masters W C Brownell
American Literature G I Woodbury
Contemporary American Literature I M Manly and E Rickert
Library of American Literature Steadman and Hutchinson
History of Classical Scholarship J E Sandys
Guide to the Choice of Classical Books J L Mayor
History of Classical Greek Literature J P Mahaffy

History of Ancient Greek Literature Gilbert Murray
History of Greek Literature to Death of Democritus F B Jevons
Greek Literature R C Jebb
Growth and Influence of Classical Greek Poetry R C Jebb
The Rise of the Greek Epics Gilbert Murray
Companion to Greek Studies R C Jebb
Latin Literature J W MacKail
History of Latin Literature M A Dimechale
A Companion to Latin Studies J E Sandys
Roman Literature to the Death of Augustus C T Crutwell
Life and Letters in the 4th Century I R Glover
Latin Poetry R I Tyrrell
Roman Poets of the Republic W Y Sellor
Poets of the Augustan Age W I Selous
The Silver Age of Latin Literature W C Summers
Short History of French Literature G Saintsbury
A History of French Literature L Dowden
Manual of the History of French Literature F Brunetiere
A Century of French Romances Edmund Gosse
French Profiles Edmund Gosse
Literature of Germany J G Robertson
Brief History of German Literature G M Priest
The German Classics from the 14th to the 19th Century F Max
Muller
German Literature as Determined by Social Forces K Francke
Romanticism and the Romantic School in Germany E M
Weymiller
Essays on German Literature H Boyesen
Studies in German Literature in the 19th Century J F Coar
History of Italian Literature Richard Garnett
History of Early Italian Literature to the Death of Dante A
Gaspary
The Renaissance in Italy J Addington Symonds
Modern Italian Literature L Colson Morley
Modern Italian Poets W D Howell
Italian Lyrics of To-day G A Grierson
History of Spanish Literature J Fitzmaurice Kelly
Chapters on Spanish Literature J Fitzmaurice Kelly
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Portuguese Literature to the End of the 18th Century E Probst
Hungarian Literature Emti Rici
History of the Literature of the Scandinavian North F W Horn
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Saga Library W Morris and F Magnusson
Danish Poets G Brandes
Popular Poetry of the Finns C J Bilton
Outline of Russian Literature Maurice Baring
History of Russian Literature A W Shchegolev
A Literary History of Russia A Bruckner
The Russian Novel M de Vogue
History of Indian Literature A Weber
Medieval Vernacular Literature of India G A Grierson
Modern Vernacular Literature of India G A Grierson
Literary History of Persia L G Browne
The Press and Poetry of Modern Persia F G Browne
Literary History of the Arabs R A Nicholson
Short History of Jewish Literature Israel Abrahams
A History of Chinese Literature H A Giles
A History of Japanese Literature W G Aston
Japanese Poetry B H Chamberlain

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OUTSTANDING EVENTS IN HISTORY

The following chronological tables cover a period of some 2,400 years, but they record only events or persons definitely mentioned in the text.

GREECE

B.C.

560. Peisistratus became tyrant of Athens and laid the foundation of that city's greatness by encouraging commerce, agriculture and the arts, 1565.

493. The Persians invade Thrace and Macedonia. Marathon, 490; Thermopylae and Salamis, 480. The Athenian statesman Themistocles built a powerful fleet, the invasion was repelled, and Athens rapidly developed into an empire, 1580.

444. Pericles begins to reign over Athens. Under his wise rule Athenian culture reached its highest level. The city was rebuilt and became the most powerful in the eastern Mediterranean, 501, 1585.

399. Socrates put to death in Athens on the charges of corrupting youth and disbelieving in the national gods, 503.

336. Alexander the Great began the series of conquests which resulted in the domination of Asia by Greek influence, and the spread of Hellenistic culture 1514.

A.D.

1821. Greek War of Independence. Aided by Russia and sympathetic supporters from all parts of Europe, including Lord Byron, the Greeks successfully revolted against Turkish rule. At the Battle of Navarino (1827) the Turkish fleet was destroyed by British, French and Russian navies, 1525, 359.

1863. Prince George of Denmark made King of the Hellenes, 1540.

1917. King Constantine, brother in law of William II of Germany, forced to abdicate in favour of his second son, Alexander. Greece ruled by the statesman Venizelos, who joined cause of Allies and obtained good terms for his country in the peace settlement after the World War, 1530, 1583.

ROME AND ITALY

B.C.

216. Hannibal invades Italy over the Alps and defeats Romans at Cannae, 1543.

58. Julius Caesar wins decisive victories over Gauls, 1209, 308, 1525.

44. Julius Caesar assassinated by Brutus, Cassius and other conspirators, 1304.

43. Formation of second Triumvirate by Mark Antony, Octavian and Lepidus, who defeat Cassius and Brutus at Philippi, 312, 1303, 1516, 1552.

31. Octavian defeats Mark Antony and becomes first Roman Emperor, 1517.

A.D.

41. Roman Emperor Claudius conquers Britain, 1528.

161. Marcus Aurelius, Stoic philosopher, becomes Roman Emperor, 1517.

312. Constantine the Great becomes Emperor of the West. After defeating Licinius in 324, he became Emperor of the East also, 1530.

A.D.

395. Death of Theodosius I, last ruler of united Roman Empire, 1580.

527. Justinian I becomes Emperor of the East. He extended the bounds of his Empire and defeated the Vandals and Ostrogoths. After his death, the Western Empire was invaded by the Lombards, 1548.

800. Charlemagne, King of the Franks, becomes Emperor of the West and founds Holy Roman Empire, 1527.

1176. Efforts of Frederick I, Holy Roman Emperor, to enlarge Empire finally failed at battle of Legnano, 1539.

1289. Decisive victory of the Guelphs over the Ghibellines at Campaldino, in which the poet Dante took part. Disputes between these rival factions had long been a feature of Italian politics, 443, 1531.

1414. Council of Constance. John Hus, excommunicated by Pope John XXIII for supporting the doctrines of John Wycliffe, was, in 1415, burnt at the stake for heresy, 1546.

1469. Lorenzo de' Medici, the Magnificent, becomes ruler of Florence. By his alliance with Milan against Venice he aroused the jealousy of Pope Sixtus IV, who excommunicated Florence. He proved himself an able ruler and accomplished man of letters, 382, 383, 1557.

1494. Savonarola begins his campaign against religious corruption in Florence, 1572.

1508. Pope Julius II, the patron of Michelangelo and Raphael, concludes League of Cambrai against Venice, 384, 551.

1796. Italy invaded by Napoleon, who seized Nice and Savoy, formed Lombardy and part of Central Italy into the Cisalpine Republic, and the Genoese district into the Ligurian Republic, and ceded Venice to Austria, 709.

1869. Italians freed from Austrian yoke under government of Cavour during reign of Victor Emmanuel II, 1526, 1584.

1860. Garibaldi, Italian soldier and patriot, captures Naples, 877.

1919. Gabriele D'Annunzio, Italian poet and patriot, led raid upon port of Fiume, which he declared annexed to Italy, 1516.

1922. Benito Mussolini, founder of the Fascist movement against Bolshevism, becomes Premier of Italy, 1560.

GREAT BRITAIN

A.D.

43. Early Britons conquered by Roman Emperor Claudius, 1528.

597. St Augustine revives Christianity, 1517.

829. Whole of England united under one king, Egbert of Wessex, 1535.

878. Alfred the Great checks Danish invasion, builds British fleet, and strengthens army, 1514.

1016. Canute of Denmark becomes King of England. He was a good administrator and encouraged learning, 1525.

Black figures denote pages where further information is given

RULERS AND FIGHTERS

Great Britain and Germany

- A.D.**
 1066. William of Normandy conquers England and introduces feudalism. Other laws and customs and language remain English, 1589.
 1215. King John forced by the barons to grant Magna Charta, limiting the power of the throne. An inert, and sometimes cruel monarch, John spent most of his reign in petty quarrels with feudal barons, 1548.
 1272. Wales conquered and invasion of Scotland begun during reign of Edward I, 1534.
 1314. Edward II, the weak son of a strong father, defeated by Bruce at Bannockburn, 1525.
 1420. Henry V of England becomes King of France. By the Treaty of Troyes he intended to ensure the English succession in France, but the guardians of Henry VI quarrelled among themselves, and France, inspired by Joan of Arc, recovered all English possessions except Calais, 1545, 139.
 1450. Jack Cade leads rebellion against Lancastrian rule, but is defeated and killed, 1525.
 1485. Battle of Bosworth ends Wars of the Roses. Richard III (York) defeated by Henry VII (Lancaster). Beginning of period of popular monarchy, 1545, 1589.
 1553. Catholicism reintroduced by Mary, 1315, 1556.
 1558. Spanish Armada destroyed during reign of Elizabeth. Great industrial development and rapid strides made in exploration and the arts and sciences. From now until about 1603 is the age of Elizabethan drama, 829, 1316, 1419, 1213, 961.
 1653. Oliver Cromwell becomes Lord Protector of England, Scotland and Ireland following establishment of Commonwealth after defeat of Crown forces at Naseby (1645); end of Civil War and execution of Charles I (1649). Primarily a soldier, Cromwell's efforts to rule by Parliament fail, 613, 953, 1194, 1527.
 1660. Charles II restored to the throne, 1527, 1195.
 1688. James II forced to abdicate by leaders of the "Glorious Revolution" and Protestant succession established by accession of William of Orange and Mary, 1547, 1589, 1318.
 1704. Duke of Marlborough (John Churchill) wins Battle of Blenheim in War of Spanish Succession, 1320, 1556.
 1714. George I, first of the Hanoverian line, becomes King of England, 1540.
 1763. End of Seven Years' War, which brought England large possessions in Canada. British Empire founded and enlarged by supremacy in India, 1591, 791, 793, 849.
 1764. James Hargreaves invents spinning jenny, which brings about the Industrial Revolution, 1261.
 1805. Lord Nelson defeats French and Spanish fleets at Trafalgar, 1052.
 1815. The Duke of Wellington wins Battle of Waterloo. Final overthrow and capture of Napoleon, 1135, 716.
 1832. Passing of Parliamentary Reform Act improves condition of middle classes. Many social and political reforms follow. Slavery abolished (1833) and new factory laws passed, 588, 669.
- A.D.**
 1846. Corn Laws repealed through the efforts of Cobden and Bright, 1037, 368, 202.
 1857. Indian Mutiny. India ruled (1858) by British Government, 208.
 1874. Benjamin Disraeli becomes Prime Minister for the second time and (1875) prevents shares of Suez Canal from being sold to French syndicate, 203.
 1882. British occupy Egypt, 544.
 1899. Outbreak of war in South Africa, 205, 482, 540, 541, 1467.
 1914-1918. World-War. Germany, Austria-Hungary and Turkey opposed by Great Britain, France, Belgium, Russia, Italy, Greece, the United States of America, and seventeen other small nations, only one-fourteenth of the world remaining neutral, 39, 233, 548, 625, 631, 707, 876, 1207, 1282, 1381, 1429, 1447, 1467, 1485.
 1919. Treaty of Versailles signed, 1208.
 1924. First Labour Ministry takes office with Ramsay MacDonald Prime Minister, 1554.
- GERMANY**
B.C.
 55. Julius Caesar, while Governor of Roman Gaul, drives back German tribes from west side of Rhine, 1299, 308.
A.D.
 476. Last of the Roman Emperors of the West deposed by German leader, Odoacer, 1561.
 911. Franconian duke becomes first King of Germany. For five generations Saxon kings ruled Germany. After a revival of the old Franconian line power fell into the hands of the Hohenstaufen emperors, chief of whom were Frederick I, called Barbarossa or "Red Beard," and his grandson, Frederick II. The Hohenstaufens were constantly in conflict with the papacy, 1539.
 1356. Charles IV promulgates the Golden Bull giving the right to elect the emperor to seven leaders of princely states, 1527.
 1617. Martin Luther begins Protestant Reformation, which Charles V, who governed Spain, Germany, the Netherlands and parts of Italy and America, unsuccessfully opposed, 1554, 1527.
 1740. Beginning of War of Austrian Succession. Maria Theresa, Queen of Bohemia and Hungary and Archduchess of Austria, engaged in struggle against Prussia. Frederick II (the Great) captures Silesia, 785, 1556.
 1806. Prussia defeated by Napoleon at Jena, 709.
 1862. Bismarck becomes chief minister of Prussia and delegate to Diet of Frankfurt, 283.
 1871. William I proclaimed Emperor of New German Empire, which developed rapidly in industrial prosperity and colonization, 1589.
 1890. Bismarck dismissed by the Emperor William II, 1589, 283.
 1914. Germany declares war on Russia and begins World-War, 39, 233, 548, 625, 631, 707, 876, 1207, 1282, 1381, 1429, 1447, 1467, 1485.
- RUSSIA**
A.D.
 1682. Accession of Peter the Great. A man of outstanding ability and strong determination, he introduced education and European industrial-

- A.D.
ism into Russia. His reforms mark the beginning of modern Russia. He built the new capital, St. Petersburg (Leningrad), 1873.
1762. Catherine II becomes Empress of Russia after a bloodless revolution and the abdication of her husband, Peter III. She was a woman of great intelligence and ruled Russia wisely. Among her many reforms were the reorganization of the army, development of land resources and the promotion of good relations with foreign powers, 1231
1801. Alexander I becomes Emperor. He attempted many reforms aiming at the emancipation of the peasants from serfdom, but the Napoleonic wars forced him to abandon them and protect Russia from invasion, 1514
1815-55. Internal condition of Russia becomes very bad owing to continual wars involving taxation of the peasants. The siege of Sebastopol (1854-5) ends Crimean War to Russia's disadvantage. Alexander II becomes Emperor and adopts a policy of reform, 1514

UNITED STATES

- A.D.
1000. Leif Ericson, Norse adventurer, lands on north eastern coast of America, 1536.
1492. Columbus discovers the coasts of South and Central America, 765.
1681. William Penn obtains Charter for Pennsylvania, 1565.
1733. James Edward Oglethorpe founded colony of Georgia, named after George II, 1562.
1767. Charles Townshend, British Chancellor of the Exchequer, enforces taxation of tea, paper, &c., which leads to riot in Boston, Mass (1770), the "Boston tea party" (1773) and outbreak of War of Independence, 1581.
1776. Declaration of Independence adopted (July 4) after skirmishes at Lexington, Concord and Bunker Hill in 1775, 235.
1780. George Washington becomes first President of the United States, 1291.
1861. Abraham Lincoln becomes President. War between North and South Confederate (South) forces, led by Robert Lee, finally defeated at Five Forks (1865), 449, 1552.
1865. President Lincoln assassinated, 449.
1890. President McKinley establishes Protectionist Tariff, 1555.
1901. Theodore Roosevelt (Republican) becomes President. French interests in Panama Canal purchased, 115.
1913. Woodrow Wilson (Democrat) becomes President, 1205.
1917. America declares war on Germany, 1205.
1921. Warren G. Harding (Republican) becomes President. Immigration Restriction Bill passed. Limitation of Armaments Congress at Washington. America concludes peace with Germany, 1205.

INDIA

- B.C.
326. Alexander the Great crosses the Indus, 1514.
264. Asoka, Emperor of India, does much to spread Buddhism, 1517.

A.D.

1000. Sultan Mahmud of Ghazni begins a series of Holy Wars on behalf of Mohammedanism in India, 1555.
1498. Vasco da Gama reaches Calcutt. India then divided among eight kings, 1539.
1505. Francisco d'Almeida (1450?-1510) becomes first Portuguese viceroy of India, 1515.
1658-1707. Reign of Aurangzeb. Mogul power is now at its height. Conquers Bijapur and Golconda, 1517.
1739. Nadir Shah of Persia invades India, 1560.
1751. Defence of Arcot by Robert Clive against the French and their native allies, 797
1756. Calcutta captured by Surajah Dowlah, Nawab of Bengal, 146 prisoners were placed in the "Black Hole of Calcutta," and only 23 survived, 800
1756. Surajah Dowlah defeated by the English at Dum dum. Return of the victors to Calcutta, 800
1757. Clive's victory at Plassey. Surajah Dowlah defeated; English become masters of Bengal, 800.
1767. Clive returns to England. East India Company sovereign of Bengal, Bihar, the Northern Circars, and part of Orissa, 800.
1772. Warren Hastings becomes Governor of Bengal, 1544.
1774. Warren Hastings becomes first Governor-General of India, 1544.
1857-8. Indian Mutiny, 208.
1921. The Earl of Reading becomes Viceroy and Governor General of India, 1569.

CANADA

A.D.

1497. John Cabot discovers Newfoundland, 1525
1635. Cartier explores coast of Newfoundland and discovers St Lawrence River, 1526
1608. Champlain establishes French colony at Quebec, 345
1610. Henry Hudson, while searching for North-West passage, discovers Hudson Bay region, which England claims, 933
1615. Champlain, in trying to find North West passage by way of the Great Lakes, discovers Lake Huron, 345
1759. Wolfe captures Quebec, 1591.
1836. The report of Lord Durham on Canadian conditions leads to change of policy resulting in greater independence for all Canadians, 1534
1885. Canadian Pacific Railway completed, 185, 188.
1896. Sir Wilfred Laurier (Liberal) becomes Premier. He remained in office until 1911 when he was defeated on the question of trade reciprocity with United States, and succeeded by Sir Robert Borden (Conservative), 1551

FRANCE

B.C.

- 58-49. Conquest by the Romans under Julius Caesar, 1299, 308.
A.D.
451. Attila and his Huns defeated in battle at Châlons sur Marne, 1517.
486. Clovis I founded the kingdom of the Franks, 1529.
752. Pepin became King of France and founded the Carolingian dynasty, 1565.

RULERS AND FIGHTERS

- A.D.
800. Charlemagne, the hero of the Middle Ages, crowned Emperor of the West at Rome. In addition to France he ruled much of what is now Western Germany, Northern Italy, Switzerland, Holland and Belgium, part of Jugoslavia, Czechoslovakia, Spain, and all of the new Austria and Hungary, 1527.
1108. Louis VI began his reign. He did much to restore order, 1553.
1422. Henry VI of England proclaimed King of France, 1545.
1429. Charles VII crowned at Rheims after the victorious campaign of Joan of Arc, 140-43.
- 1461-83. Boundaries of France gradually extended by Louis XI, who sought to break the power of the nobles, 1554.
1494. Charles VIII crossed the Alps to attack Italy. He afterwards lost his conquests, 1527.
- 1498-1515. During the reign of Louis XII there were further wars in Italy, but the French met with defeat. England and Spain invaded France and gained victories, 1554.
1544. All Burgundy added to France by Francis I, during whose reign a war which lasted for nearly 200 years was begun with Spain, 1539.
1562. Civil war on religious differences begun. Reign of Charles IX, 1527.
1572. Massacre of Protestants in Paris, 1527.
1598. Religious strife ended by the Edict of Nantes. Reign of Henry IV, 1545.
- 1601-1715. Under Louis XIV the monarchy reached its zenith and then gradually declined. Wars took place against Holland, Spain, England and Flanders. Letters, science, and art flourished. By withdrawing the Edict of Nantes, the Sun king tarnished the glory of his reign, 1554.
1793. Execution of Louis XVI and Queen Marie Antoinette. Republic established, 476-77, 481.
1804. Napoleon I Emperor of the French, 709.
1814. Louis XVIII restored to his late brother's throne. His reign was one of discontent, 1554.
1830. Civil strife in Paris. Charles X, who had become king in 1824, on the death of Louis XVIII, compelled to abdicate, 1527.
1830. Louis Philippe King of the French, 1554.
1848. Revolution and flight of King Louis Philippe to England. France again a Republic, 1554.
1852. Louis Napoleon, a nephew of Napoleon I, proclaimed Emperor as Napoleon III, 288, 55.
1870. War declared against Prussia. Surrender of Napoleon III and proclamation of Republic, 59.
1914. Germany declared war on France; General Joffre in command, 1548.
1918. France and her Allies victorious. Marshal Foch in supreme command, 1386.

TURKEY

- 1520-86. Under Sultan Solymán the Magnificent Turkey becomes all-powerful in the Balkans and threatens Vienna. Turkish Empire now extends from Carpathian Mountains to Persian frontier and along the Mediterranean to Morocco, 1576.
1883. Turks again threaten Vienna, but the intervention of the Polish King, John Sobieski, saves

Turkey and other Countries

- A.D.
- the city. From this time forward the Turks steadily lost their possessions on the Balkan Peninsula, 1576.
1829. Greeks recover their independence of Turkish rule, 359.
- 1854-56. Crimean War. Fearing Russian aggrandizement, England aids Turkey, now known as "the Sick Man of Europe." Turkey admitted to the Concert of Europe.

OTHER COUNTRIES

- A.C.
- 493-465. The Persian Empire begins to crumble under strain of constant revolts and prolonged wars with Greece. The success of Greece leads to Age of Pericles and highest achievement of Greek culture. In Rome the Patricians and Plebeians are struggling for supremacy, 1565.
- 336-276. Alexander the Great invades Asia Minor, conquering Persian Empire, Palestine and Egypt. Formation of the Macedonian Empire. South of the Rubicon Rome is fast becoming the dominant power, 1514.
- 323-30. Descendants of Alexander's generals, known as the Ptolemies, rule in Egypt. Some of the Greek states come under Macedonian rule, but the formation of the Aetolian and Achaean Leagues prevent complete domination. During these years the Egyptian fleet polices the Eastern Mediterranean, but the Ptolemies gradually lose power. Rome is steadily conquering the world. Sicily, Macedonia, Spain, Egypt and Gaul become Roman provinces. By wise diplomacy Cleopatra of Egypt retains her throne until the defeat of Mark Antony at Actium, 307.
- A.D.
- 800-1000. Charlemagne, King of the Franks, becomes all-powerful in Western Europe. By the partition of Verdun his Empire is divided into France and Germany. The Mohammedan religion is beginning to rival Christianity in Eastern Europe. England is struggling against Danish invasion. Northmen settle in Russia and Greenland, 1527, 837.
- 1300-1500. The Ottoman Turks overrun the Balkans and threaten Eastern Europe, making Constantinople their capital. This is the age of Dante, Michelangelo and Leonardo da Vinci. Florence grows rich under the rule of the Medici. European explorers open up trade routes and seek for new worlds. Columbus discovers America and Vasco da Gama reaches India by sea. England invades France, but Joan of Arc turns the tide and saves her country, 1529, 1539, 443, 381, 139.
- 1500-1700. The corruption of the Church has brought about the Lutheran Reformation, which is followed by similar movements organized by Calvin and Zwingli. Religious differences lead to the Thirty Years' War and the defeat of Catholic generals by Protestant forces. The power of Spain has been crushed by Protestant England, which, during the reign of Elizabeth, advances rapidly in commerce and the arts. The Dutch obtain their independence from Spain. Peter the Great comes to England and studies Western culture, which he intro-

- A.D.** duces into Russia. French and English colonists settle in America, 1554, 1525, 1592, 1373.
- 1700-1800** The wars of the Spanish and Austrian Succession weaken power of monarchies in Central Europe. Rise of the peoples heralded by French Revolution. All Europe involved in Napoleonic Wars. After sweeping victories in Italy, Austria and Prussia, Napoleon suffers a heavy reverse in Russia and is finally defeated by Wellington at Waterloo. The revolutionary war in America results in formation of the United States, 709, 1129, 1291.
- 1800-1900** Europe settles down after Napoleonic Wars, and an era of discovery and reform begins. Application of steam power leads to industrial revolution in England and the rapid growth of railways. Publication of Darwin's "Origin of Species" revolutionizes scientific thought. The world linked up by international

- A.D.** movements (Geneva Convention and Hague Peace Conference), telegraphic cable, aviation and "wireless." Bismarck creates military Prussia and defeats France. Africa divided among European powers. Beginning of Japanese westernization and expansion. Slavery has been abolished. Democratic government develops in Europe, and great strides made in education and welfare of the people, 841, 489, 283, 342, 1.
- 1900-25** World War results in defeat of Germany, establishment of League of Nations and general reshuffle of powers and nationalities under Treaties of Versailles and Locarno. Germany now a Republic and Russia governed by Soviet First Labour Government has been in power in England. Women allowed to vote in United States and Great Britain. Marconi perfects "wireless" telegraphy, 1467, 701, 1.

Picture Aids to the Study of History

A—ANCIENT ROME

Julius Caesar (102-44 B.C.) 1299, 1301, 1303, 1304

B—GREAT BRITAIN

Oliver Cromwell (1599-1658) 953, 954, 955, 956, 959, 980.
Queen Mary II (1662-94) 1315
Queen Elizabeth I (1533-1603) 1317, 1319
Queen Anne (1665-1714) 1320
Richard Cobden (1804-65) 1040, 1042
John Bright (1811-89) 1037, 1043, 1044
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Queen Victoria (1819-1901) 1121, 1123, 1125, 1126, 1127
Joseph Chamberlain (1836-1914) 535, 536, 537, 538, 539, 540.
Earl Balfour (b. 1848) 869, 870, 871, 873, 875, 876
 Cecil Rhodes (1853-1902) 29, 31, 32, 33, 35, 36
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King George V (b. 1865) 1459, 1460, 1461, 1462, 1463, 1468
Stanley Baldwin (b. 1867) 617, 618, 619, 620, 621, 622, 623.
Sir Francis Drake (1543-96) 961, 963, 964, 965, 968
Sir Walter Raleigh (1552-1618) 1213, 1215, 1217, 1218, 1220.
Robert Blake (1599-1657) 122, 123, 124, 125, 127, 128
Lord Clive (1725-74) 793, 794, 795, 799
Lord Nelson (1758-1805) 1045, 1046, 1047, 1049, 1050, 1051, 1052
Duke of Wellington (1769-1852) 1123, 1121, 1123, 1125, 1126
Earl Roberts (1832-1914) 205, 206, 207, 208, 209, 210, 211, 212
General Gordon (1833-80) 291, 292, 293, 296
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Lord Kitchener (1850-1916) 541, 542, 543, 544, 545, 547, 548.

Sir Robert Baden-Powell (b. 1857) 457, 458, 459, 460, 462, 463, 464
Earl Beatty (b. 1871) 37, 38, 39, 41, 42, 43, 44.
Earl of Ypres (1852-1923) 1467, 1468
Earl Haig (b. 1861) 1470, 1471
Lord Allenby (b. 1861) 1472, 1473
Sir Stanley Maude (1864-1917) 1474

C—AMERICA

George Washington (1732-99) 1291, 1292, 1293, 1294, 1295, 1297, 1298
Abraham Lincoln (1809-65) 449, 450, 451, 456
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Warren G. Harding (1874-1923) 1208, 1209
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D—FRANCE

Napoleon I (1769-1821) 709, 710, 711, 712, 713, 714, 715, 716.
Marshal Foch (b. 1851) 1361, 1362, 1363, 1365, 1367, 1368.

E—GERMANY

Frederick the Great (1712-86) 785, 787, 789, 791, 792.
Prince Bismarck (1815-98) 282, 283, 285, 286, 287.

F—RUSSIA

Peter the Great (1672-1725) 1373, 1375, 1376, 1377, 1378, 1379, 1380
Catherine the Great (1729-96) 1231, 1232, 1233, 1234, 1235, 1236

G—ITALY

Gambaldi (1807-82) 877, 878, 879, 880, 882, 884.

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Under whose wing did Joseph Chamberlain take his seat in the House of Commons? 539
What famous English soldier went among the Mahdists in the Sudan disguised as an Arab? 543
What was the Fourth Party? 874
Which was Abraham Lincoln's most famous speech? 456
What was the name of Beatty's flagship at the Battle of Jutland? 42
What great British statesman was also a famous novelist? 204
Where was the newly formed German Empire proclaimed in 1871? 299
Who introduced the first Irish Home Rule Bill? 370
Was Oliver Cromwell ever offered the title of king? 958
What king told England to "wake up"? 1464
Why was George Washington's home called Mount Vernon? 1292
On what occasion did Nelson put his telescope to his blind eye? 1045
What great English soldier was known as "the Wolf that Never Sleeps"? 467
Where did Earl Roberts win the Victoria Cross? 209
Who introduced the Dreadnought type of battleship and the battle cruiser? 630
What battle established the military supremacy of the British in Bengal? 799
What famous English seaman "unged the King of Spain's beard"? 967
What great English soldier kept a pack of hounds at Cambray? 1126.
What famous American is known as "the Father of his Country"? 1291.
Why did the expression "crossing the Rubicon" become proverbial? 1302.

Who laid the foundation stone of England's colonial empire? 1213.
What famous Russian worked in the dockyard at Deptford? 1379.
What great World War general spent four years at sea as a midshipman? 1468
At what battle did the Duke of Wellington receive his only wound? 1124
What English statesman declared that he "never read the daily papers"? 874
What country did Frederick the Great fear "more than his God"? 791
What well-known English statesman said "No one is educated who is not master of his job"? 619
What were the "Berlin Decrees"? 714
On what occasion was a memorable game of bowls played on Plymouth Hoe? 963
Whose reign was the longest in the history of Great Britain? 1121.
Who was the first journalist to become President of the United States? 1209
How did Peter the Great obtain his "window open upon Europe"? 1377
At what well-known public school was Lord Allenby educated? 1473
What does England owe to Oliver Cromwell? 954
Who taught England to think imperially? 540
What monarch described England as a "country that could not keep her colonies"? 1236
On what occasion was the signal "Well done, Concorde," run up? 374
What great British sailor said, "Hit first, but hard. Keep on hitting"? 626.

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BEAUTY BEQUEATHED BY THE ARTISTS

Achievements of Workers with Brush, Chisel, Pen and Pencil

EVIDENCES of the "artistic" instinct in man go back perhaps 50,000 years. Drawings and paintings revealing considerable power of expression have been found on the walls of caves—where the fossil remains indicate at least the Palaeolithic Age. Early man, who could not have possessed more intellect than a savage, had yet the power to make graphic representations of objects that specially interested him, such as a mammoth or a reindeer.

Perhaps the most extraordinary circumstance about these early drawings and paintings is that many of them have been found in places where daylight could never have penetrated. Yet they are remarkable for their precision of outline and for correct proportions.

These primitive artists had no idea, of course, how to make a picture as we understand it to-day. Their efforts are really akin to those of an exceedingly clever and observant child. Historically, Palaeolithic art must be regarded as a flash in the pan. The cave drawings of the Neolithic Age which followed are distinctly inferior to them. Many centuries passed before the cave painting developed into the wall painting practised by the artists of a civilized age.

Art becomes Conventionalized

In the meanwhile man had become a social and religious being. His ideas about life in general developed and influenced artistic decoration. Symbolical designs of a conventional character took the place of the graphic and lifelike drawings of early man. These decorations and the early attempts at modelling in clay or wood are weak artistically but strong in the expression of an idea. They suggest the growth of an instinct to achieve typical forms rather than lifelike representations.

Influenced by Religion

Thus the paintings of Assyrian, Babylonian, and Egyptian artists seem to us far less 'natural' than those vivid impressions recorded on the cave walls of Palaeolithic man. The figures are stilted, and often incorrectly drawn. The same postures recur repeatedly, and the designs tend to become monotonous.

Religion is the strongest motive. Egyptian friezes painted in distemper on the walls of temples, tombs, and catacombs represent scenes in the lifetime of a deceased person, and were executed in a spirit of dedication. The sculpture of this period consists mainly of mythological groups or statues of deities. Beauty in

architecture begins with the building of temples, and both painter and sculptor lend their aid in adorning the temple.

The highly conventionalized style of painting persisted even after the birth of Greek culture. One explanation of the "convention" is that it became necessary to adopt an artificial system in order to reduce the labour of artistic creation. This is a very feasible suggestion, for it is much easier to copy from another picture than to study nature for fresh forms. While the artists of Egypt, Babylon, and Assyria clung to the conventional mode they could not learn any more about the further possibilities of pictorial art. They did not know, for example, how to suggest distance, and so long as they depicted scenes on a flat plane they were not likely to discover the art of perspective.

THE BEGINNINGS OF GREEK ART

When the Greeks began to form their culture they had a wealth of artistic treasure to guide them. It must be remembered that by the time the Greeks came into prominence the empires of Egypt and Assyria had passed through long periods of prosperity and had achieved a high degree of cultivation. Phœnician merchants, visiting Greece in their ships, brought with them exquisitely decorated vessels of gold, silver, and glass, manufactured by the goldsmiths and glass workers of Tyre and Sidon. There were painted vases, statuettes of bronze or terra cotta, golden and ivory images.

The Rich Treasure-house of Mycenæ

But the chief storehouse of antiquities was the ancient city of Mycenæ, in Peloponnesus, which was the capital of a flourishing kingdom centuries before the Greek colonies spread over the Ægean peninsula. The Mycenæans were wonderful potters, goldsmiths, and gem cutters. They made beautiful plaques, breast plates in gold repoussé work, leather sword-scabbards, glass, and alabaster ware. The Greeks were continually discovering fresh and varied examples of this Mycenæan art, and presently they began to develop their own original pottery and metal work.

Few examples of Greek painting have been preserved, but it is known that the Greeks invented new modes of drawing and colouring. The beginning of true Greek art—that of historic as distinct from prehistoric Greece—dates from about 800-700 B.C., at which period the civilized world was rich in examples of contour

Black figures denote pages where further information is given

paintings. In these the outline of the figures was drawn first, and then filled in with coloured earths. The Egyptians used distemper, which they plastered on to the smooth walls of their temples, a method of working which made alteration impossible, so that the first stroke, whether successful or not, had to remain.

The Homeric Scenes of Polygnotus

It was Eumarus of Athens (7th cent. B.C.) who discovered how to make a red colour. Cimon of Cleonæ (7th cent. B.C.) learned to paint wrinkles and folds in drapery and made some attempt to produce the effect of foreshortening. Epictetus, a vase decorator of Athens in the 6th century B.C., broke away from the conventional, lifeless figure drawing of the prehistoric style, and painted men and women running, jumping, or otherwise active. Polygnotus (1567), the most accomplished of the Greek painters, lived about the middle of the 5th century B.C. His pictures, representing scenes from the Homeric poems, and painted in the form of frescoes on terra-cotta slabs or on the walls of temples and private dwellings, are dignified and moral in tone.

Vying with the Architecture of Nature

In their architecture and sculpture the Greeks were supreme. Natural conditions were greatly in their favour. Quarries of marble and limestone abounded—material offering infinitely more possibilities for artistic construction and durability than the metal or wood used by the early Oriental architects. The climate and geography of Greece formed a background that stimulated the desire for beauty of form. The surrounding hills, rising and falling in exquisite curves and folds, invited the naturally gifted Greeks to vie with the architecture of Nature herself. The atmosphere was clear, and all objects stood out sharply against the horizon.

Greek architecture, in fact, reflects nature much more clearly than the pictorial art of the same period. But, like painting and sculpture, pottery, and the art of working in metal, it began as an imitation of antique forms derived from the Oriental empires. Early Greek temples, like those of Assyria and Egypt, were constructed of metal or wood, or they were rock-hewn. The column, which in its various forms constituted the most distinctive member of the three orders of mature Greek architecture—the Doric, Ionic, and Corinthian—had its genesis, in part at least, in the stout pillar of the Egyptian temple.

It is impossible, however, to trace a closer relationship between the style of Egyptian architecture as expressed in the grand

simplicity of the pyramids or the awe-inspiring majesty of colossal temples hewn out of rocks and flanked by inscrutable sphinxes, and that of the Greeks, which aims at an infinite variety of forms. Differences in temperament, climate, and religion are the chief determining factors.

EGYPTIAN ARCHITECTURE

Egyptian architecture is dominated by a religion which challenges eternity, and its form is suited to its surroundings. The pyramid is not only a memorial to a monarch; it expresses the soul of a people set down in a desert, which perpetually reminded them of the vastness of space, and so bred in them a passion for immensity and awe-inspiring sights. The Greeks, on the other hand, lived in a sunny, colourful land. They were a people who loved beauty and lived for the moment. They were an intensely patriotic and courageous race, delighting in deeds of heroism. Their architecture, as indeed all their art, expresses their zest for existence and their desire to add to the myriad forms of natural beauty around them.

The Greeks' Worship of Beauty

It was this worship of beauty for its own sake that enabled the Greeks to create an art which gradually became independent of religious influence. They excelled in the building of temples, but they also created, in the form of the stadium and the theatre, worthy environments for the pursuit of pleasure. Love of dramatic amusement and athletic sports played a large part in Greek life, and every phase of the Greeks' public activity was carried out under conditions of architectural grace and decorative beauty. Only in their private lives did they seem indifferent to their surroundings. The average Greek citizen was meanly housed. He spent a great deal of his day in the open air, and mixed with his fellow-creatures in one or other of the public buildings of which he was justly proud. It was at a comparatively late period in the growth of Hellenic culture that the private dwelling-house began to rival the public building in magnificence and beauty.

Ages of exposure to strong sea air have removed the colouring matter with which the Greek temples were originally adorned. But it has been established by archaeologists that in most cases an appropriate colour scheme intensified the beauty of their proportions (501). The Parthenon, one of the most exquisite examples of Greek architecture, built by Ictinus (5th cent. B.C.), must have presented to the eye a glorious combination of colour and form. Its severe Doric columns

were painted yellow; the votive shields decorating the architrave were gilded; the frieze was painted in alternate metopes and triglyphs of red and blue, against which the white carved bas-reliefs stood out prominently. Crowning all the coloured sculptured figures within the pediment were grouped against a background of blue.

Other fine examples of Greek architecture were the Propylæa, built in both the Ionic and Doric orders by Mnesicles; the Temple of Ephesus, said to be the first in the Ionic order, built by Chersiphron of Cnossus and his son Metagenes (580 B.C.-577 B.C.); and the huge Corinthian Temple of Zeus at Athens, begun in the reign of Peisistratus (605 B.C.?-527 B.C.), (1565). Callimachus (3rd cent. B.C.) invented the leaf-like capital, based on the acanthus plant, which formed the distinguishing feature of the Corinthian order.

The Wonders of the Temples

Greek temples were veritable storehouses of artistic treasure. In addition to the statue of the god or goddess, which occupied a central place, there were thrones of ivory and gold, shrines decorated with reliefs in bronze, terra-cotta figurines, gold plaques and shields. Sculpture and architecture are complementary arts. The Greek architect was often a sculptor, and as the buildings improved in beauty of proportion, skill in sculpture developed. Both inside and outside the Greek temple beautiful statues of divinities and groups representing mythological incidents reminded the Greek citizen of the wonderful stories of the legendary past already celebrated in poetry or the drama.

Early Statues of the Greeks

Just as the Greeks transformed architecture from the solid, dimensional building construction of the Egyptians into an art based upon complex laws closely related to those of nature, so they developed the art of sculpture from the stage of crude modelling in wood to that marvellous perfection whereby gods and heroes, wrought out of bronze or marble, appeared to live in their streets and temples.

The early Greek statues were mere barbaric idols carved out of pieces of wood, the natural shape of which lent itself to, or suggested the form of, the effigy. There was no attempt to suggest the outline of the figure beneath the stiff drapery, and the arms hung down in straight lines. Mere slits in the expressionless face served for eyes. Yet these crude images were set up in the early temples as objects of worship, and it was from them that the classic Greek sculpture was gradually evolved.

The Greek poets ascribed the birth of sculpture

to Dædalus, a legendary personage. "The statues he made were like live beings: they saw, they walked. It was he who first opened their eyes, unbound their legs and their arms." In this symbolical fashion, which was natural to their genius, the Greeks summed up a long period in the development of their sculpture. Dædalus stood for a host of sculptors whose names were forgotten or unrecorded, but whose chisels carved out, in bronze or stone, life-like images of gods, men, and animals.

Sculpture and the Greek Athlete

The cultivation of the poetic sense, allied with that sound common sense which the Greeks applied to all their arts, encouraged the growth of sculpture. In the same manner as the Greek blacksmith became a skilled worker in metals, the Greek stonemason learned to achieve beauty of form in stone. Both were inspired by the ideal of beauty. To live constantly in the presence of beautiful things was a necessity to the Greek mind, and one form of beauty gave rise to the creation of another. Thus the physical culture of the Greek athlete came to be mirrored in the exquisite proportions of their sculpture.

But the Greek sculptors did something more than copy nature. As has been said of them by a great art critic, Winckelmann (1717-68): "Given up to a blind study of the ideal, they wrought in accordance with a general system adopted by them, rather than after nature." Even their "portraits" of athletes were not portraits in the sense that they reproduced the features of an individual. They were types for which the subject had served as a model, the personal features of the latter merging into the "ideal" as imagined by the sculptor.

Signs of Future Glories

The bas-reliefs which adorned the walls and shrines of the earlier temples were probably inspired by the painted frieze, of which they are, in a sense, a development. The pediments contained sculptured groups representing heroes in contention or merely standing in a row, but now and again an innovation, such as a kneeling figure, or a figure drawing a bow, or a more than usually skilful adaptation of the composition to the triangular form of the pediment, presages the more living art to come. Progress towards perfection is seen in the addition of more and more character to the figure.

In the 5th century B.C., during the reign of Pericles (499 B.C.-429 B.C.) (1565), who undertook the redecoration of Athens, a group of sculptors arose who emerge as distinct figures from the legendary haze that envelops the early sculptors. Myron (b. circa 460 B.C.) was

the first great sculptor of athletic figures (1138-1139). His bronze statue of the Discobolus, with its rhythmic poise and taut muscles, clearly shows a great advance in anatomical knowledge (1143). Myron also excelled in the modelling of lifelike animals, running figures, and dancing satyrs. Contemporary with him was Pheidias (490 B.C.-432 B.C.) (1139, 1140), who was also an architect and director of public works under Pericles. The two masterpieces of Pheidias are the colossal figure of Zeus at Olympia, executed in gold and ivory (1137) and another of Athena Parthenos, in the same materials, at Athens.

Scopas makes the Gods Human

In these statues and in the Hera of Polyclitus (5th cent. B.C.) (1139) the physical proportions are well-nigh perfect, while the faces still lack expression. Polyclitus, we are told, "shrank from the representation of mature age, and never dared to go beyond that of beardless youth." It was Scopas (*circa* 395 B.C.-351 B.C.) (1139) of whom it is said that he was "the first to humanize the gods in marble," who found means to trace the more delicate emotions both in the face and figure of his statues. Thence began the era in Greek sculpture which links it with the highest achievement of Hellenic culture.

The most notable work of Scopas is his group of Eros, Pothos, and Himero in the Temple of Aphrodite at Megara. In this exquisite creation the sculptor's purpose has been no other than to delineate the human soul in its varying aspects of hope, desire, and suffering, thus competing with the poet in the expression of the inmost consciousness of man.

The Exquisite Venus of Cnidus

Praxiteles (*fl. circa* 350 B.C.) (1140), a pupil of Scopas, is said to have excelled his master in the creation of his famous statue of the Venus of Cnidus. "Who gave a soul to marble?" wrote a Greek chronicler. "Who saw upon this earth the Cyprian goddess? Who put into stone the ardent desire for pleasure? It was done by Praxiteles. Olympia is deprived of the Paphian goddess, because she is descended to Cnidus." The marble Hermes of Praxiteles which graced the Heræum at Olympia is another example of Greek sculpture at its zenith (1139). The more realistic work of Lysippus (4th cent. B.C.) marks a culminating period in the mastery of bronze and marble and in the execution of colossal statues. Lysippus is noted for his dramatic renderings of the labours of Hercules. His Zeus of Tarentum was so large that the Roman conquerors of Greece were unable to transport it to their native land.

The Romans were a people of very different calibre from the Greeks. They cared less for

beauty, and, although they appreciated the masterpieces of Greek art and imitated them with very considerable success, they failed to reproduce a characteristic art of their own which could rise to the same heights of excellence. They were an intensely practical people, revelling in power and pomp. Their adaptation of the Greek forms expressed love of display, worship of authority, and respect for military achievement. In architecture they used the Greek orders, frequently mixing them so as to form a "composite" order. But they concentrated more upon utility than beauty of form. They were the greatest practical builders of the early world; their bridges and their aqueducts were marvellous feats of combined engineering and architectural skill. In their temples and public buildings they made extensive use of the dome and the arch.

Realism of the Romans

In painting and sculpture the Romans aimed at realistic portraiture, choosing as subjects rather the immediate gods of their own history than those of pagan mythology. Thus their streets were adorned with figures of emperors and warriors, and orators, and the walls of their temples were decorated with friezes or bas-reliefs depicting the triumphs of Roman soldiers. They were particularly fond of the mosaic either in marble or glass, and their pavements were studded with this style of ornamentation. But art, to the Romans, was mainly a luxury. It was not, as it was to the Greeks, a necessary part of their beings.

THE RISE OF BYZANTINE ART

It is to the art of the Byzantine Empire that we have to look for the true link between the old classical art and the new Christianized art. Byzantium, or Constantinople, was originally a Greek city built on the shores of the Bosphorus. Its story is complicated by many conquests and re-conquests and by its mixed population. Gradually, however, it acquired a distinctive character. It was one of the first of the Oriental civilizations to become deeply imbued with the Christian spirit. During the reign of Constantine (288-337) (1530) the Byzantine architects and painters developed an entirely new style of art which was to exert a widespread influence upon the arts of painting and architecture in other lands.

The Byzantine architects devoted themselves almost entirely to the building of churches. They evolved an original style which was an adaptation of the Greco-Roman and Oriental principles to the requirements of the new religion. They were the first to learn how to build a dome on top of a square structure,

and they made arches that sprang direct from the columns, thus abolishing the intervening entablature. The exterior of these early churches was plain, but inside they were richly decorated with friezes, mosaics and filigree work. The Byzantines were highly skilled goldsmiths and workers in ivory and enamel. They furnished their churches lavishly with urns, chalices and other ornaments. They had at first practically no sculpture, because the early Christian priests regarded representations of the human form as idolatrous.

Limitations of Byzantine Painting

For the same reason Byzantine painting was subjected to severe limitations, both in choice of subject-matter and in treatment. The Church issued instructions as to how the scenes connected with the story of Christianity were to be presented. Byzantine artists created the first definite tradition of sacred art. Very early Christian art had been much more human and naturalistic. Pictures of the Saviour shown as the Good Shepherd tending His flock and carrying a lamb in His arms are pre-Byzantine in origin. There were even attempts to depict the sacred stories in a lifelike manner. Under Byzantine influence this tendency was checked, and a strictly ecclesiastical mode of art came into existence. No attempt was made to portray the Saviour as a sufferer, or to illustrate the story of His life. Even when pictures of the Crucifixion were permitted, which was not until the 5th century A.D., the Saviour was represented as an emblematical figure rather than as a human being.

Art Subservient to the Church

The stiff, expressionless painting of the Byzantine school was the prevailing vogue in Europe throughout the early part of the Middle Ages. Nothing new was learned, and the range of subject-matter tended to become still narrower. During this period art in general was subservient to the Church. Nobody thought of painting landscapes or scenes from life. The sense of beauty, which had stirred the Greeks to their greatest efforts, was constricted or altogether replaced by that of religious fear.

For nearly six centuries the world was barren of art. Then there began a re-awakening of interest in the life of the early pagan peoples and their artistic products. By this time the Christian faith was firmly established. The essential spirit of Christianity, which had almost been lost in those dark ages of rigid doctrine and harsh logic, struggled out of the gloom of that long night into the freshness and sweetness of a new dawn. Men

began to look about them with renewed courage, faith and hope. The instinct for beauty revived in them.

THE REVIVAL OF ART IN ITALY

It was on Italian soil, about the 11th century, that the first signs of the renewed interest in art appeared. From among the painters of this period, whose mechanical daubs covered the church walls, there began to emerge one or two who were really artists—who recognized that their vocation was one into which they could put soul and intelligence. The Florentine Cimabue (1240-1302), was prominent among these pioneers (1528). His tempera altar painting representing the Madonna and Child, in the chapel of the Rucellai in Santa Maria Novella, is an early example of the attempt to infuse life into stereotyped forms. For the first time the Child is depicted with some degree of animation, and the face of the Mother also is informed by an expression of human sentiment.

Giotto's Frescoes at Assisi

Cimabue employed new methods of producing natural effects, which he taught his pupil Giotto di Bondone (1266-1337). Tradition has it that Cimabue discovered the youthful Giotto (1541) drawing a lamb on a piece of slate, using a fragment of coal as a pencil. But Giotto soon outstripped his master both in bold selection of subject and freshness of treatment. He painted twenty-eight frescoes in the upper church of St. Francis at Assisi. These are celebrated for their dramatic appeal and vigorous power. Giotto was the first great humanist in paint. "His figures," says a Florentine chronicler, "present so fully the lineaments of nature that they seem to live and breathe; their attitudes and gestures are so characterized that one would believe that they were weeping, rejoicing and performing other acts for the pleasure of those who regard and praise the genius and the hand of the artist."

Giotto achieved his effects with but little knowledge of the science of painting to aid him. He did not, for example, know how to suggest perspective. Close observation and deep feeling enabled him to overcome these handicaps. With Giotto, Italian painting breaks away finally from the Byzantine tradition. The painters of the next hundred years are followers of Giotto, inasmuch as they realize the power that they can wield by the forceful representation of allegories and scenes from religious life. Of Giovanni da Fiesole (1387-1445), or Fra Angelico as he is better known, it has been said that "he could not paint a

Crucifixion without the tears running down his cheeks "

THE COMING OF GOTHIC ARCHITECTURE

Synchronizing with the temper of mind which saw new possibilities for artistic expression in the realities of life as apart from generalizations, there arose a new style of architecture termed the Gothic, which, with its picturesque pointed arches and delicate workmanship, contrasted strongly with the gloomy splendour of the Byzantine tradition. The structural peculiarities of Gothic architecture, although typically mediæval, express the changed spirit which was slowly affecting all Europe. The slender strength of the Gothic cathedral indicates a spiritual energy hitherto unknown in the world while its details—the grotesque figures and ornaments with which it was lavishly adorned—reveals that rather morbid preoccupation with the darker side of religion which was so strong a feature of life in the Middle Ages.

Birth of the Easel Picture

The effect of Gothic architecture upon painting was two fold. It led almost directly to the invention of the "easel" picture as apart from the wall painting. In the Gothic churches there was very little wall space. The stained glass window gradually took the place of the fresco. Unable to find wall space in the churches for their paintings, the Italian painters of the 13th century used a framework of canvas. Thus the "picture" as we know it to day came into being. An important aspect of this change was that artists were no longer hampered by the necessity for adapting their compositions to architectural conditions. They had now a square surface upon which they were free to paint as they liked. Painting of church walls and ceilings, however, once more came into vogue with the revival of classic architecture in the 16th century.

Early Attempts to Suggest Distance

The beauty of Gothic architecture also provided a suitable background for the more living composition of Renaissance paintings. It was constantly introduced by the painters before Raphael, who found that its exquisite proportions gave them new opportunities for the expression of detail and such degree of perspective as they could compass. The earliest attempts to suggest "distance" are to be found in pictures where the background consists of a Gothic town, set on a hill, with its pointed roofs and towers and winding paths realistically painted. But the real art

of perspective was not mastered until late in the fourteenth century.

Sculpture was likewise influenced by Gothic architecture, and we find in the work of Andrea Pisano (1270-1348), who designed the first of the wonderful bronze doors of the Baptistery at Florence, an early attempt to revive the antique form of sculptured art combined with Gothic inspiration.

Zeal of the Florentine Artists

With Masaccio (1401-28) (1556) it may be said that the picture is firmly established. "From the first," Vasari tells us, "he realized that painting is nothing else but the simple imitation of natural objects in drawing and colour, and by unwearying study he overcame the difficulties and imperfections of art. He was the first to give his figures beautiful natural attitudes, natural movement, vivacity of expression, and a relief similar to reality."

These Florentine artists who lived at the close of the Middle Ages were as eager to create beauty in paint as the Greek sculptors and architects had been to produce it in their temples and sculptures. Andrea del Castagno (1390-1457), Paolo Uccello (1397-1475) (1582), Domenico Ghirlandajo (1449-94) (381-382 and 1540), Alessio Baldovinetti (1429-1496), and Sandro Botticelli (1447-1510) (1524) were the chief painters of sacred subjects. They brought to their work an enormous zest, and they left nothing scamped or glossed over. When one of them painted a thatched roof it was possible to count the number of straws of which it was composed. They registered the most minute details with marvellous cunning. They employed models—Fra Lippo Lippi (1412-69) is said to have painted his angels from street urchins. They achieved perfection of form and the beginnings of perspective, but they could not paint space. Their pictures were still flat.

Science Plays a Part

Not until the Renaissance was in full tide, and the scientific laws governing perspective came to be understood, was the painting of space possible. At this time an artist, whether painter, architect or sculptor, was usually a person of general culture. He was in the vanguard of that feverish pursuit of knowledge, both ancient and modern, which resulted in the invention of printing (589) and the discovery of America (1492) (765). Thus science played an important part in the evolution of art. Accurate knowledge was added to observation, and by training their minds to understand something of the laws of mathematics, physics, and even chemistry, the painters

of the Renaissance were able to employ surer means to achieve effects which their predecessors had only glimpsed.

Michelangelo and Leonardo da Vinci

In a more general sense, too, the great Italian painters of the sixteenth century were steeped in the lore of the Renaissance. In spite of the hours devoted to their art, they found time to keep themselves acquainted with the new thought that was stirring around them. Thus we find Michelangelo (1475-1564) (381, 1558) listening to discourses on the newly discovered philosophy of Plato and discussing its relationship to the Christian religion, and Leonardo da Vinci (1452-1519) (1584) seizing every opportunity to study physiology, astronomy, optics, engineering, and aeronautics, proving himself, as the crowded years passed by, to be not only supreme as a painter, but the most versatile and knowledgeable man of his age.

Raphael, Titian, and Tintoretto

The powers of mind exhibited by Michelangelo and da Vinci were such as to rank them with the greatest geniuses in any sphere of activity. We think of them, as we think of Homer, Dante, or Shakespeare, as men divinely inspired and appointed to open our eyes and ears to the deeper truths of existence. To them and to the supreme technicians of the 16th century—who were only inferior to them in quality of mind—to Raphael (1483-1520), (549), Titian (1477-1576) (1389), Tintoretto (1518-94) (1581), Giorgione (1471-1511) (1541), and Correggio (1494-1534) (1530), the art of painting owes its mastery of form and colour, and its final evolution from the "flat" stage to that of rounded figures and the representation of space.

The Splendours of Florence and Venice

The wealth of artistic treasure produced in Florence and Venice during these years of the great re-awakening of the instinct for beauty is staggering to the imagination. We have to think of churches and chapels, designed in the classic style, whose walls and ceilings are covered with supreme examples of the painter's and sculptor's craft. Overhead, perhaps, some mighty conception of Michelangelo, wrought with a miraculous boldness which takes our breath away, tells one of the wonderful stories of the Bible. We should notice the huge size and lifelike moulding of the figures, and the effect of foreshortening in accentuating the sense of distance. Or, set in an archway, we might see a frieze by Raphael—a seated Madonna surrounded by winged cherubs, or

an interior crowded with significant figures, some of them painted as though in rapid movement. Giorgione we should esteem most for richness of landscape; Correggio for grace, and Tintoretto for perfection of colour.

Leonardo's "Last Supper"

If we were fortunate enough to enter the little convent church of Sta. Maria delle Grazie at Milan, we should see a picture—sadly blistered and faded, but saved from the further ravages of time by modern skill—which is perhaps the highest achievement of religious art in all ages. It is the "Last Supper" of Leonardo da Vinci.

The golden age of Italian painting synchronizes, as we have seen, with the revival of the classic style in architecture, which was introduced by Filippo Brunelleschi (1377-1466), and encouraged by Michelangelo, who supervised the construction of the magnificent cathedral of St. Peter at Rome. Artists and craftsmen of all kinds are seeking to escape from the Gothic convention and imitate the classic examples of plastic art. In sculpture the transition from religious to secular art is particularly rapid. At this time Benvenuto Cellini (1500-1571) (129, 1528) produced his exquisite statues of pagan gods and goddesses. During the Gothic period the art of the sculptor had been subordinated to that of the architects, but with the bronze "David" of Donatello (1386-1466) (1533) and the marble "Moses" of Michelangelo, sculpture as an independent art takes a new lease of life.

Development in Other Countries

The development of art in other countries followed much the same course as in Italy. In the Middle Ages it was permeated by religious ardour and the Gothic spirit. Early examples of German religious art are the panel-paintings and altar friezes of Meister Wilhelm and Hermann Wynrich in the 14th century. In these the devotional spirit predominates, but in the paintings of the German and Flemish schools there was shown even at an early period an impatience with tradition. The Flemish brothers, Hubert (1370?-1426) and Jan van Eyck (1380?-1440), were the first to replace the formal gold background of the panel with a natural representation of scenery. Their joint work "Worship of the Lamb" is an excellent example of naturalistic rendering in early religious art. It was the van Eycks who first used oil colours.

The van Eycks were pioneers in that detailed representation of homely interiors and quiet landscapes which came to be a leading characteristic of Netherlandish art. In this respect

they played an important part in the secularization of painting. They showed how the most commonplace objects could be made beautiful and significant by skilful rendering and composition. This tendency to endow the realities of daily life with poetic meaning, and to lavish as much care upon the painting of furniture and the humblest household utensil as upon the figures of sacred personages, marks the beginning of the modern epoch in art. It was apparent even in the religious pictures of the period.

Reaction from Mediæval Formalism

The reason for this change is to be sought rather in the growing enthusiasm of the painter for his craft than in a lack of interest in religious subjects. It was a natural reaction from the trite formalism which dominated sacred art during the Middle Ages. Given freedom of treatment, the painters of the transition period continued to seek inspiration in the story of Christianity. The dramatic renderings of incidents in the lives of the saints, painted by Roger van der Weyden (1400-1464), another great Flemish master, show how much religious art gained by a more human treatment of sacred subjects coupled with a wider range of technical mastery.

The Exuberance of Rubens

Flemish painting reached its zenith in the school of Peter Paul Rubens (1577-1640) (1571), the first of the modern masters to vie with the ancients in mastery of form, sumptuousness of colouring, and prodigality of invention. In the canvases of Rubens we seem to see the born painter gladly escaping from a long period of bondage, and revelling in a freedom which enables him to depict all phases and aspects of life with like reverence and enthusiasm. Religion, myth, fable, history, or the affairs of yesterday are all subjected to a treatment which gives equal life and significance to things past and present, grave or gay, profound or superficial.

If, in the style of Rubens—and even in his masterpiece, the animated and dramatic "Descent from the Cross," now in Antwerp Cathedral—there seems a want of depth in quality and a certain hardness of colour compared with the paintings of the early masters, it must be remembered that the art of painting had but recently emerged from a tedious and cramping servility to tradition. The faults of Rubens are due to exuberance and too great readiness to put brush to canvas; but the ample display of his gifts opened up a new world, full of character and circumstance, to the painter.

GERMANY AND THE RENAISSANCE

Meanwhile, Germany had produced two great artists, Albrecht Dürer (1471-1528) (1534) and Hans Holbein the Younger (1497-1543) (1546), in whose work the lingering traces of mediævalism are combined with the new spirit of inquiry and the reforming zeal in religion. In Germany the Renaissance had been an awakening rather of thought than of feeling, and it was followed by the great revolt against the established Church known as the Reformation (1554). The artists of this period still painted frescoes in churches, but their work was more realistic than that of the Italians. Their aim was to depict in the grimmiest possible manner the terrible truths of life and religion. Their pictures abound in satire and bitter irony. On every occasion they point the finger at corruption, and expose the weaknesses and inconsistencies in human nature. The more sombre aspects of the story of Christianity, the sufferings of the Saviour and the saints, which the Italian masters had neglected or avoided, are accentuated by these painters, imbued with the stern spirit of the Protestant era. Beauty was less their object than the enforcement of a moral.

The Protestant Spirit in Art

Supreme examples of this severe style of art are the "Melancholia" of Dürer and Holbein's "Dance of Death." In the former the artist seems intent upon crowding into one picture all the most dismal omens devised by the mediæval mind, together with symbols illustrating the vanity of human existence. Holbein's picture is a bold expression of the Protestant spirit, for in it pope and beggar, decrepit age and youth, are made to appear equal before the terrible lesson of mortality.

Dürer excelled as an engraver, which art had sprung into being following the rapid growth of the printed book. As an etcher and draughtsman he was without peer, and although his pictures impress us with gloom we cannot but admire his mastery of technique.

The rise of Protestantism made it difficult for painters to earn a living. Decoration of churches was regarded by a large section of the reformed religion as unnecessary and even sinful. There was a good deal of vandalism. This change has an important bearing upon the history of art. Painters had to seek patrons elsewhere. Holbein migrated to England, where, under the patronage of Henry VIII (1491-1547) (1545), he became a celebrated portrait-painter and did much to form the English school of painting which preceded Hogarth.

Genre Painting and the Dutch School

Realism in painting was carried a further stage by the Dutch school. Here, again, the shifting of patronage from the Church to the guild, or the corporation, or to wealthy merchants who desired pictures for their private houses, had a profound influence upon the painter's choice of subject. Portraits, groups of guildsmen, historical scenes, and "still life" studies took the place of religious pictures. In the former there was more scope for realistic treatment and attention to detail.

This dedication of the artist's efforts to the demands of the age becomes specially noticeable in the work of Frans Hals (1580-1666) (1543). When the Dutch, after a long and bitter struggle, secured their independence, their artists painted groups of officers for the regiments whose glory had been enhanced by that event. A famous example of Hals' group-painting is his "Civic Guard Banquet," now in the Haarlem Museum. Hals also excelled in the genre picture, by which is meant one that illustrates a commonplace as apart from a romantic or heroic subject. His studies of types as seen by him in the street or in the tavern are among the earliest in this style of painting, and are remarkable for their quality of colour and truth to the original.

Genre painting was very popular in Holland throughout the seventeenth century. Its success was largely due to the changed tastes of art-patrons. The rich burgomaster, somewhat phlegmatic and prosaic in his manner of living, preferred to adorn the walls of his house with scenes of actual life rather than with pictures of an imaginative kind. He liked subjects which faithfully mirrored the familiar life around him—a banker weighing gold, a party of card-players, or a family assembled at a meal. The Dutch painters treated these seemingly trite subjects with marvellous skill and cunning, so that they revealed an interest hidden from the ordinary observer.

The Magic Brush of Rembrandt

There are obvious limitations, however, to the genre picture, and the greatest of the Dutch masters of the seventeenth century, Rembrandt (1606-1669), transcended them, often painting pictures which offended the narrow tastes of his patrons. In his choice of subject and bold treatment Rembrandt (1569) preferred to follow his own instinct rather than to suit the fashion of the day. Like Hals, he filled his sketch-book with impressions of beggars, market-women and urchins. Some of the greatest portraits of this greatest of portrait-painters are those of insignificant, lowly people.

In his religious pictures, such as "The Holy Family," feeling predominates. His object is to make the onlooker familiar with remote things, to produce an illusion of nearness, almost of homeliness, in the spectacle of sacred happenings. No painter so vividly and realistically tells a story as Rembrandt. By the magic of his brush, faces ravaged by time and disease are invested with the beauty that belongs to the inward being of the subject.

THE BEGINNING OF IMPRESSIONISM

With Rembrandt the style of painting known as "impressionism" begins, although the term was not actually employed by art critics until the nineteenth century. Impressionism merely means that the artist has taken pains to express his personal "impression" of a scene or subject. It is a term apt to cause confusion, unless used to illustrate the distinction between the art which simply records and that which interprets as well as records. Each one of us sees existence in a particular way, according to our predisposition and sympathies, but there are obviously a large number of natural objects which we all see in much the same way. When an artist paints such objects as a tree or a horse, he has to satisfy a common sense of the appearance of these things. But he may go beyond this and paint natural objects in an unfamiliar manner, as seen by himself. We have then to allow for the intrusion of the artist's personality, which interprets the manifold phases of life in a manner which we could not have done ourselves.

Velasquez, the Painter's Painter

Modern painters may, then, be divided, roughly, into two groups, the "naturalistic" and the "impressionistic." Of the former the Spanish Velasquez (1599-1660) stands out as incomparably the most successful painter of "things as they are." The portraits of Velasquez (1305, 1533) produce an instantaneous conviction of truth. We see the subject through no mirror formed by the artist's mood or bias, but as the former must have appeared to the eye. On the other hand, Velasquez does not rise to such heights as Rembrandt in imaginative conception of his subject. Velasquez has been called the "painter's painter." His mastery of colour and form made his pictures the eagerly sought models of both naturalists and impressionists. "Everything that Velasquez paints," said John Ruskin, "is right."

Murillo (1617-1682) (717) and Goya (1746-1828) are the only two other Spanish painters not altogether obscured by the overshadowing genius of Velasquez. Murillo, deeply religious

by nature, painted the stories of Christianity on the walls of Franciscan convents, while Goya, living a century later, was attracted by the literature of his age, and, catching something of the spirit of Cervantes, painted genre pictures of a strongly satirical character, and also realistic scenes in the bull-ring, and portraits.

The Pseudo-classicism of France

French art at the beginning of the seventeenth century was severely and coldly classical in tone. Just as deeply as they had been saturated in the Gothic spirit, the French architects and sculptors became imbued with the principles of the classic revival. In architecture the new movement found its highest expression in such buildings as the Tuileries and the Royal Palace at Versailles, while sculptors once more sought their inspiration in the marbles of ancient Greece.

Until now French painting had been purely decorative. Like the painting of all countries, during the Middle Ages it had been confined to the interior decoration of churches. But when the quickening spirit of the Renaissance reached France it stirred the logical French mind to a boundless admiration for the multitude of forms expressed in ancient art, rather than to that passionate quest for new forms which the same spirit had stimulated in Italy, Spain, and England. France was thus peculiarly the home of what is called "pseudo-classicism." In literature, drama and poetry, as well as in the plastic arts, the French men of culture aimed at the reproduction of ancient models by the use of rigid laws and principles.

So, in the paintings of Nicholas Poussin (1594-1665) (1567) the theme is nearly always classical and the treatment severely in accordance with a carefully worked-out system based on classic models. Nature is carefully reproduced, although always with austerity, but the figures belong to another world. There is no "atmosphere" in a landscape by Poussin, but those of his rival and contemporary Claude Lorrain (1600-82) are full of this quality. Watteau (1684-1721) (1587) added poetry and romance to the classical background, introducing figures borrowed from the Italian romance literature—Harlequin, Pierrot and Pierrette—and mirroring the gay and leisured life of the court of Louis XV. The landscapes of Corot (1796-1875) (1530) are unique for softness, delicacy of effects, and poetic charm.

Foreign Influences in England

English painting, prior to the eighteenth century, owed much to foreign influences. At the time when Holbein domiciled himself in

England and painted his celebrated portraits there was practically no native talent. The Venerable Bede (872-735) (1509) is said to have taught his monks how to paint and to illuminate manuscripts, and Henry III (1207-1272) (1545) gave instructions for his castles and palaces to be decorated, although the work was done mainly by Italian artists. Conditions in Britain during those periods in the evolution of the civilized world when art flourished in other lands were not favourable to artistic expression. There were constant tribal disputes and repeated invasions by foreign hordes. The beginnings of civilization were followed by lapses into barbarism, and it was not until after the Norman Conquest (1066) that these islands, settled down sufficiently to the comparative wealth and leisure which are essential to artistic growth.

SAXON AND NORMAN ARCHITECTURE

The Romans taught our ancestors how to build strong castles, bridges and walls. They brought their own architects and sculptors, goldsmiths and metal workers. Very few traces of Romanesque art are now extant, for when the Romans left Britain, after their 400 years' stay, the Britons and Saxons were too much occupied in fighting each other to carry on the Romanesque tradition or to preserve examples of Roman skill and knowledge. When the first Christian kings began to build churches and monasteries, about the seventh century, they had to employ foreign architects; they found no native masons capable of carrying out such ambitious schemes. Gradually, however, the Saxons learned from their more experienced masters and evolved a style of their own. Examples of the Saxon style, with its round towers and arches, are to be seen in parts of Canterbury Cathedral.

Celtic and Teutonic influences, resulting from invasions, led to modifications of the Saxon style, and after the Norman Conquest (1066) it practically disappeared. Within half a century the Normans had built a large number of churches, abbeys and castles in their own style. Finding some churches in course of erection, they introduced Norman features, such as the vaulted roof with carved wooden ceiling. Cathedrals in the pure Norman style are those of Rochester, Winchester, Peterborough and Ely.

Early English Architecture

In the course of two hundred years a characteristic English style emerged. Many of the Norman features were dropped and new ones, such as the pointed arch and flying buttress, appeared. The general tendency of this period

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was towards lightness of construction, the solidity of the building being ensured by greater ingenuity in calculating thrusts and strains. Norman churches, in spite of their solid pillars, often fell to the ground. Examples of early English architecture in this transitional phase, preceding the full Gothic period, are Westminster Abbey and Salisbury Cathedral. The distinguishing feature of English Gothic architecture is the emphasis upon vertical lines known as the Perpendicular style.

The Beautiful Elizabethan Mansion

English domestic architecture is rightly renowned for its beauty and individuality. By the fourteenth century the Norman castle, built for strength rather than for comfort, had definitely given place to the Tudor mansion. The feudal baron had required a stronghold; the squire needed more convenience. Later, the Elizabethan gentleman could afford to indulge a taste for elegance as well as spaciousness. Thus the typical Elizabethan mansion, a beautiful, symmetrical building with gables and high-pitched roof, came into being.

Inigo Jones and Wren

Renaissance influence brought about at first an added richness of decoration, and then the introduction of a pure Italian style by Inigo Jones (1573-1652) (1548). The Banqueting Hall in Whitehall illustrates the ideal of refinement and dignity which Jones, after his study of Italian architecture, set up as a model for the architects of the Stuart period. The Great Fire of London (1666) gave Sir Christopher Wren (1632-1723) (297) the opportunity to rebuild St. Paul's Cathedral in the Renaissance style, and also the City churches. Some of the latter are Gothic in manner, but all are distinctively English and stamped with the individuality and genius of their designer.

Rise of English Painting

The practice of inviting foreign painters to the English court was revived by the Stuart kings, who set up a high standard of taste. Sir Anthony van Dyck (1599-1641) (1583), the last of the great Flemish masters of the school of Rubens, spent many years in England. He painted portraits of James I (1566-1625) (1547) and Charles I (1600-49) (1527). It was not until the second quarter of the eighteenth century that there appeared the first group of genuinely English painters.

Of these, three stand out as representatives, not of a school—for the English do not take kindly to schools—but of quite distinct phases of the national genius. William Hogarth

(1697-1764) (1546), living in an age when manners were degraded and morals corrupt, joined forces with the dramatist and the satirical poet in exposing deformities of human nature and blemishes in society. If Hogarth had not recorded the evils of his time with a brush he would have lashed them with a pen. It was as an "author," in fact, that he loved to be considered; and there is much meaning in Charles Lamb's quaint remark that his two favourite books were "Shakespeare and Hogarth."

How Hogarth Lashed Society

Hogarth painted life exactly as he saw it, treating his subject either with wit and humour, as in "The Enraged Musician," which depicts a violin-player vainly endeavouring to practise a piece in competition with innumerable street noises; or with deliberate, merciless satire as in the six pictures entitled "Marriage à la Mode," which tell the story of a loveless, fashionable marriage. Each picture in this series stands by itself as one act of a human comedy, such as might have been composed by a Molière or a Congreve. The attitudes of the figures express volumes of subtle meaning, and the most trivial incident exposes the avarice, cunning and greed inherent in human nature.

Reynolds and Gainsborough

Essentially a moralist and individualist, Hogarth paid little regard to the traditional schools of painting. His own peculiar style was exactly adapted to his grim purpose. In striking contrast to him, Sir Joshua Reynolds (1723-92) (1475), who from his student days upwards had been steeped in classical lore, developed a manner in which it was always possible to trace the influence of the earlier masters, from Leonardo da Vinci to Velasquez, while he never painted any subject that did not give him opportunities for the expression of gracefulness, piquant beauty, freshness and charm. But even in his simplest studies, such as "The Age of Innocence," Reynolds painted less from life and nature than from classical models. As a portrait-painter Reynolds ranks second only to his contemporary and rival Thomas Gainsborough (1727-88) (1476), who aimed more at a likeness of his subject than at the creation of a "picture," which was always the purpose of Sir Joshua.

Doubtless, the result in each case was a "picture" in the broadest sense of the word, but Reynolds tends to subordinate the character of his subject to some conception of his own in keeping with it. Thus in his portrait of Mrs. Siddons as the Tragic Muse, he depicts the famous actress seated upon a Grecian throne,

with clouds at her feet; while behind her the shadowy fates hover (161). Gainsborough's portrait of Mrs. Siddons shows her attired in ordinary walking dress, without any grandiose surroundings, just as she might have walked into the studio (1479). Each artist chose the method which at once exhibits the qualities and conceals the defects of his genius. Reynolds excelled in the painting of draperies and other accessories, and in classical composition. Gainsborough, lacking these qualities, made up for them by the directness with which he seized upon and expressed the soul of his subject.

Romney, Raeburn, and Landseer

Neither Reynolds nor Gainsborough formed a definite school, but they set new fashions in portraiture and landscape. Such lesser masters as George Romney (1734-1802) (1053), Sir Thomas Lawrence (1769-1830) (1482), William Etty (1787-1849) (1536), John Hoppner (1768-1816) (1546), and John Opie (1761-1807) (1562) maintained the high standard of English painting during the eighteenth century. A fine example of genre portraiture at this time is the "Greenwich Pensioner" of Sir Henry Raeburn (1756-1823) (1569). Benjamin West (1738-1820) (1583), an American by birth, devoted himself to the painting of contemporary history, and was the first to introduce modern costume into his pictures. Henry Fuseli (1741-1825), James Northcote (1771-1786) (1561), and Charles Leslie (1794-1859) painted scenes from Shakespeare. Genre painting of this period was developed by Sir David Wilkie (1785-1841) (1589) ("The Blind Fiddler") and William Collins (1788-1847) ("As Happy as a King"), while John Martin (1789-1854) painted ambitious canvases illustrating Biblical subjects ("The Deluge," "Belshazzar's Feast"). The painting of animals was brought to a high pitch of perfection by Sir Edwin Landseer (1802-73) (633) and George Morland (1763-1804) (1559).

The Landscapes of Constable

Apart from the work of Richard Wilson (1714-1782) (1590) and Gainsborough, English landscape-painting during the eighteenth century compared unfavourably with that of France. There were no pieces to equal, in effects of colour, light and shade, those of Claude Lorrain. A tradition of dourness and dullness prevailed. It was even asserted by the more pedantic academicians that the green tints in Nature could not be rendered in paint, and that brown should be the pervading hue. This fallacy was daringly exposed by John Constable (1776-1837) (1530), who set himself to

paint Nature as he had studied her from childhood in his beloved Suffolk lanes and pastures. "In art," wrote Constable, "there are two modes by which men aim at distinction. In the one by a careful application to what others have accomplished, the artist imitates their works, or selects and combines their various beauties; in the other he seeks excellence at its primitive source, Nature."

In the landscapes of Constable the beauties of the English countryside are for the first time faithfully mirrored. Heavily loaded with rich colours, which are those of Nature in her varying aspects—the all-pervading greenness of the fields and foliage, the golden yellow of the wheatfield, the red of the earth—his canvases are yet full of light and air and delicate shadow. To Constable no colour is dominant in Nature, but each has its true place in the general scheme. He has never been excelled as a painter of the countryside in all seasons from the bright transparencies of spring to the rich brownness of autumn. His massed and moving clouds suggest the weight of water which will presently fall to earth. "Give me an umbrella," said a fellow-artist when told that he was about to see a new Constable landscape.

The Amazing Art of Turner

Just as Constable saw Nature with an all-seeing eye for her changing dress and fluctuating moods, so J. M. W. Turner (1775-1851) (1582) saw her with an inward eye, seeking out poetic effects of light and colour hidden from his contemporary. An artist of very different temperament, a dreamer and sun-worshipper, Turner mystified the critics by the admixture of truth and fantasy embodied in his pictures. In the prodigious range of his artistic vision, in his power of reproducing luminous effects, such as in "Ulysses deriding Polyphemus" or "The Fighting Temeraire," Turner is unique. At first unappreciated, he found a vigorous champion in John Ruskin (1819-1900) (1341), who devoted a whole volume in praise of his genius and artistic principles. But no school of painting arose from Turner's work or the influence of Ruskin. Turner stands by himself, a great individualist and idealist, a supreme artist whose secret died with him.

Art Divorced from Authority

Individualism, in fact, is the keynote of nineteenth-century as of more recent art in all its departments. Art in general has taken on a new aspect. It has become less precious and more popular. Freed from its long association with ecclesiasticism on the one hand, and academic rules on the other, it has become more spontaneous if less productive of the highest

achievements. Following in the main paths beaten out by the great masters, the little masters of the modern era strike out innumerable side tracks and by-ways of their own, reflecting here and there something of the design of Michelangelo, the colour of Velasquez, or the composition of Rembrandt.

Concurrently with the divorce of art from authority, the range of subject widens. The nineteenth century, with its busy stir of social activity, is the great age for genre painting, whether sentimental or realistic. Simple domestic scenes, public events, the life of the streets, the drama of the hospital or the "problem" picture are increasingly the vogue. The patron of the modern painter is the populace, with its mixed tastes and need of variety.

Developments in France

In France an "impressionist" school, aiming at the transcription of an intensely personal mood, was led by Edouard Manet (1832-83) (1555) and Hilaire Degas (1834-1917). Reacting, as they did, against the stuffiness of interiors Jules Bastien-Lepage (1848-1884) painted his "open-air" pictures of life in the fields. Puyis de Chavannes (1824-98) headed a group of young painters who felt the need for freedom of imagination. Chavannes' frescoes have something of the breadth and beldness of the classic style. This was the age of Rosa Bonheur (1822-99) (969), greatest of animal painters, and of Meissonier (1815-91) (45), master of the detailed representation of military life.

Rodin and Constantin Meunier

The art of sculpture in France had become commonplace and lifeless since the eighteenth century, when Jean Baptiste Pigalle (1714-85) and Jean Antoine Houdon (1740-1828) revived the classic style. It received a fresh impetus from the rugged marbles of Auguste Rodin (1840-1917) (801). The Belgian, Constantin Meunier (1831-1905), also introduced a living interest into sculpture by his groups of modern labourers at work.

THE PRE-RAPHAELITE MOVEMENT

About the middle of the nineteenth century a number of young English painters, headed by Dante Gabriel Rossetti (1828-82) (465, 215, 1461-8), formed themselves into a group known as the Pre-Raphaelite Brotherhood. Tiring of the conventional styles of painting in vogue, and convinced that the later Italian masters had sacrificed truth to beauty of form, these enthusiasts decided to model themselves upon the painters who preceded Raphael. The movement was sponsored by John Ruskin

and profoundly influenced modern painters. Among those who signed their canvases "P.R.B." were Holman Hunt (1827-1910) (1221, 215, 465), whose "Light of the World" illustrates the principles of the school by its careful emphasis upon detail and naturalism; J. E. Millais (1829-96), (213, 465), an exquisite colourist; T. Woolner (1823-92) (1591); and J. Collinson (d. 1881). Edward Burne-Jones (1833-98) (1525), whose style of painting had partly inspired the movement, lent his adherence to it, as did Ford Madox Brown (1821-93) (1524), another lover of realistic truth in painting.

Pre-Raphaelitism proved to be only a phase in modern painting, and many of its temporary adherents presently broke away from its stringent laws. The most questionable of its tenets was that which obliged the artist to paint with absolute fidelity objects and scenes of which he could have no sure knowledge. This was carrying an excellent general principle of truthfulness to irksome extremes. It may be said that the merits of the painters of the Pre-Raphaelite movement were not obscured by certain glaring deviations from its laws.

The Symbolism of Watts

The original mind of G. F. Watts (1817-1904) (1221) was not to be cramped by adherence to any school. His symbolical pictures "Hope," "Love and Life," and "Mammon," show how the painter may deliver a message to his age as clearly as the prophet or social reformer. Another artist, an American by birth, who made his own laws and defended them by witty arguments, was J. McNeill Whistler (1835-1903) (1583). His lovely nocturnes, one of which Ruskin described as "a pot of paint flung in the face of the public," at first found few admirers, but the reputation of Whistler as a master of magical line and tone effects has long been assured.

More recent British painting affords a wide range of subject and variety of treatment. Reaction against the humdrum style of genre picture brought about a return to classical subjects, the outstanding exponents of this school being Lord Leighton (1830-96) (1552), Sir L. Alma Tadema (1836-1912) (1515) and Sir E. J. Poynter (1836-1919) (1567). The romance of commerce, ancient as well as modern, is expressed with fine gusto by Frank Brangwyn (b. 1867) (1524), whose fresco, "Modern Commerce," in the Royal Exchange, is a good example of this artist's original style. Lady Butler (b. 1850) (1525) occupied a unique position as the painter of stirring battle pieces. Such pictures as "Forging the Anchor," by Stanhope Forbes (b. 1857), and

'The Casual Ward,' by Sir Luke Fildes (b 1844) (1538), showed a vast improvement in the handling of simple genre subjects. Among portrait painters, the American, J. S. Sargent (1856-1925) (1572), was unmistakably the most brilliant of his age.

Examples of British sculpture in an age not remarkable for achievement in this art are the Wellington Memorial in St. Paul's Cathedral by Alfred Stevens (1818-75) (1577), Lord Leighton's 'The Sluggard' and G. F. Watts' 'Physical Energy.' Sir Edwin Landseer sculptured the four lions at the base of the Nelson Monument, Trafalgar Square. Memorials in exceptional taste to the poet Shelley and Queen Victoria were designed by E. Onslow Ford (1852-1901) (1538) and Alfred Gilbert (b 1854) (1541) respectively.

Architecture in becoming more cosmopolitan

has temporarily lost that distinctive appeal which expresses the character of a nation. For some years during the nineteenth century taste alternated between classic and Gothic revivals, but gradually it became obvious that neither of those styles was really adaptable to modern conditions. The English Houses of Parliament designed by Sir Charles Barry (1795-1860) (1518) express the late Gothic revival at its best, while the Bank of England of Sir John Soane (1753-1837) (1576) is a good example of the classic manner. A period of confusion, in which all styles were merged, preceded the new era of scientific building with its steel framework and standardized exterior. A building of to-day is primarily an engineering feat, and while beauty it possesses, arising from fitness of man to ends, has yet to reach full development through the closer co-operation of engineer and architect.

A CHRONOLOGICAL HISTORY OF ART

EARLY ART

Name	Place	Date	Important
ELMIUS CYMON	Athens Cleonæ	7th cent. B.C. 7th cent. B.C.	Painter. Introduced red colour. Painter. First to attempt effect of force and form.
FRITHEUS POLYCHOTUS	Athens Athen	6th cent. B.C. 5th cent. B.C.	Vase decorator. Painted figures in action. Painter. Painted scenes from the Homeric poems on walls of public buildings.
ICHLUS MNEKLES	Athens Athens	5th cent. B.C. 5th cent. B.C.	Architect. Built the Parthenon. Architect. Built the Propylæa.
CHEPHRON METAGENES (son of above)	Athens Cleonæ	5th cent. B.C. 500-477 B.C.	Architect. Built Temple of Artemis at Ephesus.
CALAMACHUS	Athen	5th cent. B.C.	Architect. In the temple of Apollo at Corinthian order.
MYRON .. PHIDIAS	Athen Athens	b. about 480 B.C. 490-432 B.C.	Sculptor. Bronze figure of the Discobolus. Architect and sculptor. Director of Public Works and the Parthenon. Gold and ivory figure of Zeus at Olympia.
POIKILETUS SCOPUS ..	Sicyon Paros	482-476 B.C. 395-351 B.C.	Sculptor. Gold and ivory figure of Heracles. Sculptor. First to humanize the gods in marble. Group of Dioscuri and Hermes in marble.
PIRATHEUS	Athens	369-340 B.C.	Sculptor. Marble statue of Venus of Capri.
LYSIPTUS	Sicyon	4th cent. B.C.	Sculptor. Bronze groups of figures of Heracles.

EARLY RENAISSANCE ART

CIMABUE	Florence	1240-1302	Painter. Introduced life into stereotyped religious art.
GIOTTO DI BONDONE	Florence	d. 1337	Painter. First humanist in paint. Peligious frescoes.
SIMONE MARTINI ..	Siena	1281-1344	Painter. Frescoes of decorative beauty and devout feeling.
FAB. ANGELICO	Florence	1387-1455	Painter. Frescoes of the Crucifixion.
MEISTER WILHELM	Germany	fl. c. 1380	Painter. Religious school.
During the reign of Henry III (1216-72)	English palaces and castles decorated by Italian painters		
NICCOLÒ PISSANO	Italy	1208-78	Sculptor and architect. Sculptured pulpit in Siena Cathedral and built many churches.

A Chronological History of Art (*contd.*)EARLY RENAISSANCE ART (*contd.*)

<i>Name</i>	<i>Place</i>	<i>Date</i>	<i>Remarks</i>
ANDREA PISANO	Italy	1270-1348	Sculptor. Designed first bronze door of the Baptistery at Florence.
Architecture passes through transition stages from Byzantine to 13th centuries.			Romanesque and Gothic during 12th and 13th centuries.
MASACCIO	Florence	1401-28	Painter. First great painter of natural movement and relief.
ANDREA DEL CASTAGNO	Florence	1390-1457	Painter. Vigorous design.
PAOLO UCCELLO	Florence	1397-1475	Painter. Introduced improvements in perspective.
DOMENICO GHIRLANDAJO	Florence	1449-94	Painter. Monumental style.
MARCO BOTTICELLI	Florence	1444-1510	Painter. Decorative style.
PIETRO PERUGINO	Umbria	1448-1524	Painter. Teacher of Raphael.
GIORGIO VERRI	Venice	1430?-1516	Painter. Teacher of Titian and Giorgione.
MANTEGNA	N. Italy	1431-1506	Painter. Master of form.
HERMANN WYNDICH	Germany	f. c. 1400	Painter. Panel paintings and altar pieces.
HUBERT and JAN VAN EYCK	Flanders	f. c. 1380-1440	Painters. First signs of naturalism in Flemish religious art. "Adoration of the Mystic Lamb." Introduced oil painting.
ROGER VAN DER WEYDEN	Flanders	1399-1464	Painter. Realistic studies of the Passion.
LEONARDO DA VINCI	Florence	1452-1519	Painter, sculptor, and architect: "The Last Supper"; equestrian statue, monument to Francesco Sforza; built aqueduct to Milan; author of treatises on scientific subjects.
MICHELANGELO BUONARROTI	Florence	1475-1564	Painter, sculptor, and architect. Painted ceiling of Sistine Chapel; bronze statue of Moses; supervised construction of St. Peter's, Rome.
RAFAEL	Umbria	1483-1520	Painter. Wall paintings. Broad, dramatic manner.
TITIAN	Venice	1477?-1576	Painter. Decorative style. Colour and romance.
GIORGIONE	Venice	1471-1511	Painter. Rich landscape.
CORREGGIO	N. Italy	1494-1534	Painter. Advance in relation of light to colour.
TINTORETTO	Venice	1518-94	Painter. Remarkable for depth of passionate feeling.
FILIPPO BRUNELLESCHI	Florence	1379-1446	Architect. Introduced classic style.
DONATELLO	Tuscany	1386-1466	Sculptor. Bronze figure of David.
LORENZO GHIRBERTI	Florence	1378-1455	Sculptor. Bronze gates of Baptistery of Florence.
BENVENUTO CELLINI	Florence	1500-71	Sculptor. Statues of pagan deities in gold and silver.
ALBRECHT DÜRER	Germany	1471-1528	Painter and engraver. Expresses spirit of the Reformation. "Melancholia," satire.
HANS HOLBEIN THE YOUNGER	Germany and England	1497-1543 In England 1526-43	Painter. Satirical subjects—"The Dance of Death"—and portraits.

Forerunners of the great Italian masters.

Great Italian masters. Achieved mastery of form and rounded figures.

SEVENTEENTH CENTURY ART

FRANS HALLS	Holland	1580-1666	Painter. Historical and genre pictures.
REMBRANDT	Holland	1606-69	Painter. First of the "impressionists." Religious subjects and portraits.
A. CUYP	Holland	1620-91	Painters. Cattle and landscape.
PAUL POTTER	Holland	1625-84	
PETER PAUL RUBENS	Flanders	1577-1640	Painter. First of the modern masters of colour and form.

The Dutch School.

Chronological History of Art (*contd.*)SEVENTEENTH CENTURY ART (*contd.*)

Name	Place	Date	Remarks
VAN DYCK.. .. .	Flanders	1599-1641	Painter. School of Rubens. His portraits influenced English school.
NICHOLAS POUSSIN ..	France	1594-1665	Painter. Classical style of landscape.
CLAUDE LORRAIN.. ..	France	1600-82	Painter. Introduced atmosphere into classical style of landscape.
JEAN ANTOINE WATTEAU	France	1684-1721	Painter. Romance of Court life.
VELASQUEZ	Spain	1599-1660	Painter. Great master of naturalistic school.
MURILLO	Spain	1617-1682	Painter. Religious subjects.
FRANÇOIS GIRARDON ..	France	1630-1715	Sculptor. Decorated Royal Palace at Versailles.
PIERRE PUGET	France	1622-1694	Sculptor. "Milo of Crotona," Versailles.
GIOVANNI BERNINI	Naples	1598-1680	Sculptor. "Apollo and Daphne," Villa Borghese.
INIGO JONES	England	1573-1652	Architect. Italian Revival. Banqueting Hall, Whitehall.
SIR CHRISTOPHER WREN..	England	1632-1723	Architect. Renaissance style. St. Paul's Cathedral. City churches.
JULES HARDOUIN MANSART	France	1646-1708	Architect. Built Palace at Versailles.

EIGHTEENTH CENTURY ART

WILLIAM HOGARTH	England	1697-1764	Painter. First great English master. Satire. "Marriage à la Mode."
SIR JOSHUA REYNOLDS ..	England	1723-92	Painter. Classical style. Portraits and religious subjects.
THOMAS GAINSBOROUGH ..	England	1727-88	Painter. Naturalistic style. Portraits and landscapes.
GEORGE ROMNEY	England	1734-1802	Painter. Historical subjects and genre.
SIR HENRY RAEBURN .. .	Scotland	1756-1823	Painter. Portraits. "Greenwich Pensioner."
JOHN OPPE.. .. .	England	1761-1807	Painter. Historical. "The Murder of David Rizzio."
SIR DAVID WILKIE	Scotland	1785-1841	Painter. Genre. "The Blind Fiddler."
JAMES NORTHCOTE	England	1746-1831	} Painters. Scenes from Shakespeare.
CHARLES LESLIE	England	1794-1859	
RICHARD WILSON	England	1714-82	Painter. First great landscapist.
JEAN BAPTISTE GREUZE..	France	1725-1805	Painter. Domestic life.
FRANÇOIS BOUCHER	France	1703-70	Painter. Watteauesque style.
JEAN HONORÉ FRAGONARD	France	1732-1806	Painter. Court life. "The Swing."
JEAN SIMÉON CHARDIN ..	France	1699-1779	Painter. Genre and still-life.
GOYA	Spain	1746-1828	Painter. Satire and realism.
RAPHAËL MENGES	Germany	1728-79	Painter. Religious subjects.
JEAN BAPTISTE PIGALLE..	France	1714-85	} Sculptors. Classical revival.
JEAN ANTOINE HOUDON..	France	1740-1828	
BERTEL THORWALDSEN ..	Copenhagen	1770-1844	Sculptor. "Christ and the Twelve Apostles."
JOHN FLAXMAN	England	1755-1826	Sculptor. Classic revival. "St. Michael." (Designed Wedgwood Pottery.)
ANDREAS SCHLUTER	Germany	1662-1714	Sculptor. Equestrian statue of Great Elector, Berlin.
SIR WILLIAM CHAMBERS..	England	1726-96	Architect. Built Somerset House.
JACQUES SOUTHWELL ..	France	1713-80	Architect. Built Panthéon.

MODERN ART

JOHN CONSTABLE	England	1776-1837	Painter. Greatest English landscapist.
J. M. TURNER	England	1775-1851	Painter. Imaginative style. Supreme painter of luminous effects.
GEORGE MORLAND	England	1763-1804	Painter. Animals and genre.
SIR EDWIN LANDSEER ..	England	1802-73	Painter and sculptor. Animals. Sculptured lions, Trafalgar Square.

Black figures denote pages where further information is given

A Chronological History of Art (contd.)

MODERN ART (contd.)

Name	Place	Date	Remarks
JOHN CROMP (Old Crome)	England	1769-1821	Painter Landscapes
R P BONNINGTON ..	England	1801-28	Painter Historical and architectural The Column of St Mark
THOMAS STOTHARD	England	1755-1834	Painter Historical "The Canterbury Pilgrims"
WILLIAM BLAKE	England	1757-1827	Painter and book illustrator The Book of Job
SIR ALBERTUS WALL CALVERT	England	1779-1844	Painter Landscape and seascape "View of the Thames"
BENJAMIN WEST	America	1738-1820	Painter Contemporary history First to introduce modern costume
DANTE GABRIEL ROSSETTI	England	1828-82	Painter Imaginative treatment of legends, and portraits Dante's Dream
W HERMAN HUNT ..	England	1827-1910	Painter Naturalistic The Light of the World
SIR J E MILNE	England	1829-76	Painter Brilliant colours The North West Passage
T WOOLNUT	England	1825-92	Sculptor Statues of contemporary famous men
J COLLINSON ..	England	d 1881	Painter Genre The Charity Boys Debut
SIR EDWARD BURN-JONES	England	1833-98	Painter Poetic rendering of Arthurian legend Merlin and Vivien
FORD MADOX BROWN	England	1821-93	Painter Realistic pictures of historical and Biblical subjects King Lear, Elijah and the Widow's Son
G F WAITS	England	1817-1904	Painter and sculptor Symbolical pictures Love and Life, Hope Physical Energy (sculpture)
J MCNIHL WHISTLER	America	1834-1903	Painter Nocturnes and portraits Battersea Bridge, Thomas Carlyle
LORD LEIGHTON	England	1830-86	Painter and sculptor Classical subjects Clytemnestra, The Sufferer (sculpture)
SIR L ARMA-STRONG	England	1836-1912	Painter Classical subjects Sappho
SIR J I POWELL	England	1836-1919	Painter Classical Atlantis Pace
LADY BULL	England	b 1850	Painter Battle picture
J S SAUNDERS	America	1834-1925	Painter Portraits Ellen Terry as Lady Macbeth 'Joseph Chamberlain'
FRANK BRANCKMAN	England	b 1867	Painter Sumptuous decorative colours
SIR JAMES FRANKS	England	b 1853	Painter The problem picture The Confession
AUGUSTUS JOHN	England	b 1879	Painter Great draughtsman and portrait painter Lord Foster Lord George
SIR JOHN NOBLE	England	1753-1837	Architect Designer Bank of England Classical manner
SIR CHARLES PARRY	England	1795-1860	Architect Designed Houses of Parliament English Gothic manner
ALFRED STEVENS	England	1818-75	Sculptor Wellington Memorial in St Paul's Cathedral
E OSWOLD FORD	England	1852-1901	Sculptor Henry Irving as Hamlet
ALFRED GILBERT	England	b 1854	Sculptor 'Marcus' Monument to Queen Victoria Winchester
JOHN W SWAN	England	1847-1910	Sculptor of animals Leopard Running, etc
ALFRED WATFHOUSE	England	1830-1905	Architect Natural History Museum, London
J H BENTLEY	England	1839-1902	Architect Roman Catholic Cathedral, Westminster
SIR GILBERT SCOTT	England	b 1880	Architect Designed Liverpool Cathedral

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A Chronological History of Art (contd.)

MODERN ART (contd.)

Name	Place	Date	Remarks
JEAN BAPTISTE COROT	France	1796-1875	Painter. Poetic charm and aerial perspective.
JEAN FRANÇOIS MILLET	France	1814-75	Painter. Romance of real life: "The Workman's Monday."
ÉDOUARD MANET	France	1832-83	Painter. Impressionistic style.
HILAIRE DEGAS	France	1834-1917	Painter. Impressionistic style.
JULES BASTIEN LEPAGE	France	1848-84	Painter. Pictures of open-air life.
PUVIS DE CHAVANNES	France	1824-98	Painter. Classic style applied to modern life.
ROSA BONHEUR	France	1822-99	Painter. Greatest animal painter.
JEAN LOUIS MEISSONIER	France	1815-91	Painter. Military life.
FRANÇOIS RUDE	France	1784-1855	Sculptor. "Love Triumphant."
AUGUSTE RODIN	France	1840-1917	Sculptor. "The Thinker." "The Kiss."
CONSTANTIN MEUNIER	Belgium	1831-1905	Sculptor. "Unloading."
JEAN FRANÇOIS CHALGRIN	France	1739-1811	Architect. Arc de l'Etoile.
FRITZ VON UHDE	Germany	b. 1848	Painter. Realistic treatment of religious subjects.
MAX KLINGER	Germany	b. 1857	Painter. Classical style. "Christ in Olympus."
LEOPOLD KARL MÜLLER	Austria-Hungary	1834-92	Painter. Oriental life.
AUGUSTUS KISS	Germany	1802-65	Sculptor. Bronze statue of Amazon and Panther.
REINHOLD BEGAS	Germany	b. 1831	Sculptor. Schiller monument, Berlin.
KARL FRIEDRICH SCHINKEL	Germany	1781-1841	Architect. Greek revival. Built Nikolai-kirche, Potsdam.
MARIANO FORTUNA	Spain	1838-74	Painter. Historical style.
ELIAS REFIN	Russia	b. 1844	Painter. Historical style and portraits. "The Reply of the Cossacks to Sultan Mahmoud IV," "Count Leo Tolstoy."
MAX ANTRKOLSKY	Russia	1845-1902	Sculptor. "Ivan the Terrible."

Picture Aids to the Study of Art

SCULPTURE:

(a) EARLY GREEK:

MYRON (b. circa 460 B.C.).
Discobolus, 1143.

PHEIDIAS (480 B.C.-432 B.C.).
Athena, 1137.

PRAXITELES (fl. c. 350 B.C.).
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TITIAN (1477?-1576):

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(b) MODERN:

VELASQUEZ (1599-1660):

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Decorated by the King of Spain, 1313.
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Raising his hat to a market-girl, 717.
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SIR JOSHUA REYNOLDS (1723-92):

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His house in Leicester Square, 1476.
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THOMAS GAINSBOROUGH (1727-58)

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Books for the Student of Art

A Manual of Greek Archaeology Maxime Collignon
 The Story of the Renaissance W H Hudson
 The English School of Painting Ernest Chanin
 The Flemish School of Painting Prof J Wauters
 The Dutch School of Painting Henry Havard
 George Frederik Watts & E Dibdin
 Constable Frank Rutter
 Grosse Beatrice A Waldman
 Rembrandt T C I Broekhu
 Rembrandt J L Minson
 Reynolds Frank Rutter
 The History of Modern Painting R Muther
 Modern Spanish Painting A G Tourle
 A Century of Painters of the English School G R Rodgrave
 The Scottish School of Painting W D McKay
 The Baroque School D C Thomson
 The Master Painters of England Gieson White
 Fifty Years of British Art J L Hodgson
 British Contemporary Artists Cosmo Monkhouse
 History of Water Colour Painting in England, 1750-1880 G R Rodgrave
 History of Modern Architecture James Ferguson
 Modern Gothic Architecture T G Jackson
 The Architect and his Artistic W H White
 Architecture for General Readers H H Tatnam
 The Seven Lamps of Architecture John Ruskin
 The Renaissance in Italy John Addington Symonds
 Stones of Venice John Ruskin
 The Autobiography of Benvenuto Cellini John Addington Symonds
 The Life of Michelangelo Buonarroti John Addington Symonds
 Donatello Lord Balcarras

British School of Sculpture W Bell Scott
 Painting Glasse, Early, Italian Teutonic Sir J J Poynter
 The Italian Pre-Raphaelites W Cosmo Monkhouse
 Landseer and Animal Painting in England W J Loftie
 Dante Gabriel Rossetti & G Stephens
 Modern Painters John Ruskin
 Five Great Painters Lady Eastlake
 Life of Titian J Northcote
 Velasquez P G Konody
 Pre-Raphaelitism John Ruskin
 Rubens R A W Stevenson
 The Life and Works of Sir Christopher Wren E J Enthoven
 Wren's City Churches A H Mackmurdo
 Waddell and his School E Staley
 Richard Wilson, R A T Wright
 Romney and Lawrence Lord R Gower
 Five Painters of the Victorian Era Sir W Baynes
 Life of Turner C W Hornbury
 Life of Bertel Thorvaldsen M R Barnard
 The Renaissance in Italian Art S Brinton
 Life of Leonardo da Vinci J W Brown
 A Court Painter and his Circle Mrs C Bearne
 Hans Holbein the Younger A B Chamberlain
 Albrecht Durer R F Heath
 Nicolas Poussin C P Landor
 Polykleitos A Mahler
 Pergamo I Knapp
 Life and Letters of Frederick Lord Loughton Mrs R Barrington
 Edouard Manet J Loran
 Botticelli H P Horne
 Jones and Wren W J Loftie
 Life of Hugo Jones P Cunningham

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 Where can we best study the creations of Phidias and his fellow-workers? 1140
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 What was the distinguishing feature of the Corinthian order of architecture? 1670
 Who first used oil colours? 1674
 Who created the first definite tradition of sacred art? 1672.

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WOMAN'S LONG STRUGGLE FOR RECOGNITION

Trials Endured and Victories Won in Many Spheres of Life despite Disabilities

THE badness of men," wrote the author of Ecclesiasticus, "is better than the goodness of a woman." "Day and night," according to the Hindu Laws of Manu, "must women be held by their protectors in a state of dependence." In the words of a Chinese classic writer, "a bride should only be a shadow and an echo in her husband's house." "A slave," said the great Greek philosopher Aristotle, "is wholly deprived of the faculty of deliberation; children possess it, but with them it is incomplete and imperfect; and the woman has it, but only in a feeble and ineffectual way." In a speech addressed to the women of Athens by the famous statesman Pericles are these words: "Aspire only to those virtues that are peculiar to your sex, and deem it your greatest praise not to be talked of one way or another."

The above are some of the views of antiquity as to the moral and intellectual worth of women and the part they should play in the world. Though they read strangely enough to-day, these opinions appear less surprising when we consider the comparatively recent origin of the movement that has led to the wide freedom and opportunity enjoyed by women in the more progressive countries. The present altered position of women is primarily due to the movement for the higher education of women, and this dates back no farther than the 19th century.

Down the ages women have for the most part been hampered and hedged in. But despite their disabilities, with no help from public opinion, and solely by their power of head, heart, and even hands, many women have passed beyond the boundaries arbitrarily set for their sex, and succeeded in writing their names on the scroll of fame. These instances sufficiently serve to show that from the earliest times woman has been capable of great thoughts and great deeds, but they were regarded at the time as exceptional and failed to alter the general conception of woman's powers and of her place in society.

Primitive Division of Labour

Man is physically stronger than woman, and it was this superiority that determined the primitive division of labour between the sexes. The primeval woman stayed at home while the man hunted wild beasts or fought with human foes. Not that the woman was idle while he was away, for what food he brought home was probably not sufficient for their

needs. At first the woman would busy herself in supplementing the flesh diet with fruits, roots, and other parts of the plants that she found ready to her hand. As the mouths to be fed increased, she discovered, through the pressure of necessity, that these plants could be cultivated. It was probably the woman that invented agriculture.

While the man developed his energy, courage and resource outside, the woman occupied herself with agriculture and other peaceful industries and with handicrafts of the home. After the man had domesticated the farm beasts the need for hunting ceased and he himself became domesticated, being anchored to the soil, whose food-giving properties the woman had discovered.

Thus woman, in so far as she attached man to the soil, may be regarded as the founder of civilization, for the earliest civilizations were agricultural. In the early agricultural states woman was man's helpmate. Side by side man and woman worked at their appointed tasks, and so long as the tradition of this economic equality of the sexes remained sufficiently strong the position of woman continued to be both free and dignified.

Few Rights or Privileges

Once fairly attached to the soil, man proceeded to apply the organizing power he had developed in warfare and the chase to the problems of the farm. He improved the simple agricultural devices invented by woman, who thus came to be superseded in the field. As the agricultural states grew in number and wealth, they aroused the envy and greed of their neighbours or themselves sought to enlarge their boundaries by war. When the social structure came to depend more and more on success in warfare, man lost his domestic qualities and once more became a fighting animal, and woman fell from her honourable position of helpmate and was perforce driven farther and farther into the seclusion of the home.

The subordinate position of woman was further aggravated by the aggression of pastoral races, such as the Jews, under whose patriarchal form of government women had few, if any, rights or privileges. But even under these conditions woman did not lose her inspiration and power of initiative, and it was to a woman that the Israelites turned in their hour of peril, when Deborah urged Barak to march against the Canaanites under Sisera.

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IN BABYLONIA AND EGYPT

In such early civilizations as Babylonia and ancient Egypt women enjoyed a high status. According to the legal code of the Babylonian king, Khammurabi, the husband gave his wife a dowry and at his death she became head of the family. A divorced husband left dowry and children with the wife, besides paying her an annuity. Whoever slandered a married woman was branded.

Queen Hatshepsut of Egypt

In ancient Egypt inheritance was through the female line, and women could occupy the throne. One of the most famous of these female rulers was Queen Hatshepsut of the XVIIIth Dynasty, who assumed full power after her husband's death. So amazing were the vigour and capacity of this ambitious woman that the equally gifted Pharaoh, Tethmosis III, whose throne she shared, suffered total eclipse during their joint reign. On Egyptian monuments the wife is shown by the side of her husband, and the masterful Hatshepsut figures in the dress of a king.

Goddesses and Priestesses

In the pantheon of these two ancient and powerful civilizations goddesses held high rank, the Babylonian Ishtar being mother of all the gods, and the goddess Isis the most famous of the Egyptian deities. High-born Egyptian ladies coveted the title of priestess of Hathor, and so influential were some grades of the priestesses of Ammon that these offices were often secured by the king for his daughters in order to make his title to the throne more

Women as Oracles

In other early religions women played an important part. The organ of inspiration of the oracle of Apollo at Delphi was a woman known as the Pythoness, who, when seated upon the tripod, was believed to receive the divine afflatus from a mystic vapour rising through a fissure in the ground below. Other oracles of Apollo were operated by women. Among the Teutonic peoples holy women were occupied with divination, and some of these, such as the prophetess Veleda, were regarded almost as goddesses.

In the Greece of the age of Pericles—perhaps the most cultured civilization that the world has ever seen—modest women lived in comparative seclusion and were little more than household slaves. They enjoyed far less freedom than the women of the Homeric age. They did not go into society, and were only

seen in public at tragedies and religious festivals. That the wish was present to escape from this over-strict tutelage and share the interests and culture of man is made clear by the existence at Athens of a numerous class of highly educated venal women, of whom Aspasia (5th century B.C.) is a typical example. Although the political influence she is said to have exerted over Pericles (461-429) may have been exaggerated, there is no doubt that Aspasia was a brilliantly accomplished and cultured woman, the able head of a political salon.

In later days the Macedonian dynasties were characterized by the prominent position enjoyed by women of the royal house and also by the long line of distinguished women who occupied the throne. Of the many Macedonian queens who displayed imperious will and commanding ambition the last, Cleopatra (69-30 B.C.), who had the Roman lords of the world at her feet, is the most famous (307).

The Roman Matron and Public Affairs

The lot of the Roman woman was better than that of the Greek. In spite of her complete legal dependence, she retained, from the early agricultural days, that sturdy independence of character that is commonly associated with the Roman matron. Unlike the Greek woman, her world was not bounded by the walls of her house. She took a keen and patriotic interest in public affairs, and in moments of national danger could rise superbly to the occasion. The Roman mother had entire charge of the early training of the children, and the proud devotion with which she moulded their young minds for their future duties is well shown by the story that is told of Cornelia (2nd century B.C.). Asked to show her jewels, the mother of the Gracchi brought forward her sons.

As the Roman civilization progressed, broader views came to be held as to woman's place in the scheme of things. The legal disabilities of Roman women were mitigated from time to time, until, under the Christian Emperor, Justinian I (483-565), their position had become one of great personal independence (548).

IN EARLY CHRISTIAN DAYS

Although Christianity in many ways tended to raise the status of women, the canon law looked askance at the independence given to them in the later Roman law, and proceeded to undo these advantages. The cloister, indeed, provided a career for the single woman, but the married woman was placed in entire subjection to her husband. Like the Jews of old, St. Paul very definitely believed that woman should be in a state of subservience, and under the influence of the Pauline tradition and of

the writings of many of the Fathers of the Church woman was regarded throughout the Middle Ages almost wholly in the character of temptress of man

In the age of chivalry woman, to all appearance, attained a position of great respect, but this was only on the surface and at best applied to women of a certain rank. From the high born lady and her damsel the candidate for knighthood learned the rudiments of knightly courtesy and love, which he was expected to put into practice when he was admitted to knighthood, but women of low degree he was at liberty to treat with scorn and even cruelty. Nor did the knight confine his brutality to the lowly. The records of chivalry abound in instances of personal violence being offered to ladies of the highest rank, and under several codes of laws a husband was allowed to beat his wife

Women of the Renaissance

With the Renaissance a spirit of equality began to prevail between the sexes. A more broadly human ideal was set up, the ideal of the fully developed personality, and this was applied to women in exactly the same degree as to men. Each sex claimed the right to cultivate everything that was harmonious with its own nature. The women of the Renaissance excelled in intellectual and artistic culture as well as in beauty and grace. Women were admitted to professorial chairs, notably at Bologna. Every field of human activity and knowledge was opened to them. The fashion set by Boccaccio (1313-75) (1523) in his book on famous women, 'De Claris Mulieribus', was followed by a host of men and women writers, who demanded greater freedom and better education for women. But this flood of early feminist literature was, for the most part, pitched in an extravagant key and had no permanent or far-reaching influence

In Puritan Households

During the reign of Elizabeth (1558-1603) English women enjoyed a generous education and a large measure of personal freedom. In that enlightened age were trained those resolute and strong minded women whose sound judgment and readiness in crisis illumine the dark pages of the Civil War

After the Restoration the ideal of womanhood sank rapidly, no less through the licence of the Court than through the strictness enjoined by Puritanism. To shine in the fashionable world, all that a woman needed was a meretricious brilliancy, but in Puritan households, on the other hand, the women were rigorously secluded from the contaminations of the outside world

The Puritan father viewed with disfavour the prevailing tendency of learning to walk hand in hand with vice. And so the English woman, discouraged in any attempt at independent thought or action, came to be regarded as a being who had no separate individuality and no interests apart from those which arose from her associations with man

Ladies of the Salons

In France women had never wholly lost their hold on culture. The ladies of the salons put into circulation ideas concerning their sex that were new to the world and thus were sown the seeds of the modern feminist movement. Indeed, the point of view taken by the Vicomte de Segur (1756-1845) in his book 'Les Femmes, leur Condition et leur Influence' which embodies the French 18th century ideas on women, is largely that of to-day. The first systematic attempt to deal with the education of girls was made by Fenelon (1651-1731) (1587), in 1688, in his treatise, 'De l'Education des Filles' and this book guided French opinion throughout the 18th century. Fenelon declared in favour of the cultivated housewife, and he held the balance between the ladies of the salons who advocated nothing short of higher education and those others who thought that the less a girl knew the better

The Pioneer Work of Mary Astell

During the 17th and 18th centuries little was accomplished in England in the direction of removing the disabilities of women although from time to time voices were raised in attempts to improve their status. Towards the end of the 17th century Mary Astell (1668-1731) wrote much on the subject and, nearly 200 years before the establishment of Newnham and Girton, she proposed the foundation of a college for women. But this was discouraged as savouring of monasticism

Daniel Defoe, Champion of Women

Among male champions of women was Daniel Defoe (1659?-1731) (1532), who, although he shared the commonly accepted opinion as to women's subordination to men, was at any rate in favour of improving their education and had a high view of their powers of mind. "We reproach the sex every day," wrote this very acute observer, "with folly and impertinence, while I am confident, had they the advantages of education equal to us, they would be guilty of less than ourselves."

I would have men take women for companions, and educate them to be fit for it"

Women came in for more consideration in the reign of Queen Anne through the influence

of the essayists. Addison (1518) and Steele (1577) by no means overlooked the follies of the fashionable women of the day, but they aimed their shafts at the system that produced them rather than at the offenders themselves. All the shortcomings of women they attributed to lack of education. They looked upon learning, however, mainly as a pastime, and although they left a mark on the education of the women of the upper classes, and although the admirable literary style of their essays could not fail to stimulate sound and accurate thinking, their delicate and refined sentimentality proved of little use at a time when more robust and thorough going measures were needed.

THE BLUESTOCKINGS

Towards the middle of the 18th century, as the outcome of the essays of Addison and Steele, appeared the group of ladies known as the Bluestockings, of whom Mrs. Elizabeth Montagu (1720-1800) was the leading spirit. They took their name, perhaps, from the fact that one of the gentlemen who frequented their meetings so far infringed social conventions as to wear blue worsted stockings instead of the regulation black silk. The Bluestockings sought in their assemblies to promote a healthier and more intellectual tone by substituting literary conversation and discussion for the usual cards and gossip. Famous names among the Bluestockings and their followers are those of Mrs. Delany (1700-88), Mrs. Vesey (1715-91), Elizabeth Carter (1717-1806), Mrs. Chapone (1727-1801), Mrs. Barbauld (1743-1825) (1518), Hannah More (1745-1833) (1559), Anna Seward (1747-1809) (1574), Fanny Burney (1752-1840) (1525), and Joanna Bailie (1762-1851).

Achievements of the Bluestockings

These "learned ladies" undoubtedly established the claim of women to be as learned as they would, and several of them distinguished themselves as authors, but they did not effect any substantial alteration in the condition of women. One and all, they acquiesced in the prevailing ideas as to the sphere of woman; they made no bid for equality of opportunity. Moving, as they did, in an atmosphere of comfort and security, the most that they achieved was the development of literary attainments as a diversion. The letter in which Mrs. Barbauld refused the offer of the post of superintendent to a college for the higher education of women projected by Mrs. Montagu is significant of the feeling of the times:

A kind of Literary Academy for Ladies (for that is what you seem to propose), where they are to be taught in a regular systematic manner the various branches of science, seem to me better calculated to form such

characters as the *Précieuses* or the *Femmes Savantes* of Molière, than good wives or agreeable companions. . . . Young ladies, who ought only to have such a general tincture of knowledge as to make them agreeable companions to a man of sense, and to enable them to find rational entertainment for a solitary hour, should gain these accomplishments in a more quiet and unostentatious manner—Subject to a regulation like that of the ancient Spartans, the thefts of knowledge in our sex are only connived at while carefully concealed, and it displayed, punished with disgrace.

The Influence of the French Revolution

But social and economic conditions were soon to bring about a change. Liberty was in the air. The revolt of Britain's American colonies, the Industrial Revolution, and the French Revolution all combined to free individuality. The French Revolution shook civilized society to its foundations, and in that great upheaval women played conspicuous parts—from Charlotte Corday (895) to the luckless queen, Marie Antoinette (475), who, despite the empty follies of her life, went nobly to her death. The flames of revolution purged of all that was ignoble the freedom that French women had so long enjoyed and had come eventually to abuse.

In 1792, inspired by the stirring events in France, appeared the first impassioned protest made by an Englishwoman against the subordinate and dependent position occupied by women. In her "Vindication of the Rights of Woman" Mary Wollstonecraft (1759-97) proclaimed the individuality of woman. She urged that woman had her own capacities and powers, and that these should no longer be neglected but should be given the fullest opportunity to develop by means of a scientific training of the mind. Although, in the Tory reaction that followed the French Revolution, such a book found little immediate favour in England, it proved the herald of the modern feminist movement.

Women Start to Work in Factories

The Industrial Revolution had put an end to many industries that kept women busy in the home. The majority of working women went to work in the factories, and, through first-hand acquaintance with the outside world, learned self-reliance. Gradually many of the single women of the middle class were forced by economic pressure to earn their livelihood outside their homes, and for them the chief employment available was that of governess. It was to educate these forlorn gentlewomen, who were sadly ill-equipped for teaching, that the first attempts to provide really adequate education for women were made, and Queen's College itself was a training school in connexion with the Governesses' Benevolent Institution.

THE HIGHER EDUCATION OF WOMEN

The 19th century witnessed, in the more progressive countries, a general determination to improve the education of women. In England the pioneer of the movement was Frederick Denison Maurice (1805-72), who founded Queen's College, Harley Street, in 1848; and from the enlightened teaching provided at this college came most of the educational advantages that women enjoy to-day (1557). Among the first to attend lectures at Queen's College were two women who became famous as the chief leaders in the movement for the higher education of women—Dorothea Beale (1831-1906), principal of the Ladies' College at Cheltenham, and Frances Mary Buss (1827-94), head of the North London Collegiate School. To give women the same academic advantages as men, Somerville College and Lady Margaret Hall at Oxford, Girton and Newnham Colleges at Cambridge, and other colleges were opened; and within a few years Cambridge had a woman senior wrangler and a woman senior classic.

As was perhaps natural, the pioneers of women's education devoted their efforts to developing the more highly intellectual ideals. In course of time, however, female education came to be established on a thoroughly broad and sound basis, calculated to give women an opportunity to hold their own in their new work in the world.

Once women had been educated, and thus fitted for employment, the next stage was to secure their entry to the professions and vocations for which previously men alone had been trained and which, consequently, were monopolized by men. In some instances this process entailed a considerable amount of friction, but the obstacles were gradually overcome, and to-day the wonder is not what work women can and may do, but rather the very few spheres that are still closed to them.

The First British Woman Doctor

The difficulties experienced by women in gaining admission to the medical profession are typical of the prejudices that had to be surmounted in this invasion of new fields. That a woman should think of becoming a doctor was not only unheard-of, it was regarded by many as positively improper. From the moment when, at the age of twenty-four, Elizabeth Garrett Anderson (1836-1917), the first British woman doctor, announced her intention of studying medicine she met with nothing but discouragement from the profession and from society at large (1515). Medical school after medical school refused to receive her as a full student, and it was only by

dint of private study and by adopting other shifts that she contrived to get the necessary training.

When the time came for her to obtain her qualification to practise, the examining bodies refused her admission to their examinations. At last, in 1863, she obtained the licence of Apothecaries' Hall. The Society of Apothecaries could not at that time exclude any candidate who satisfied the ordinary tests, but no sooner had she obtained her licence than the society altered its constitution and excluded women.

Thus equipped, Miss Garrett obtained, in 1866, the post of general medical attendant at St. Mary's Dispensary, London, an institution which later became the New Hospital for Women. Not until 1870 did she obtain her medical degree, and then she went to Paris for it. Four years later the London School of Medicine for Women was founded, and in 1876 an act of parliament was passed empowering the British medical examining bodies to confer degrees or diplomas irrespective of sex.

The Question of Parliamentary Suffrage

There remained a far graver task than either the improvement of female education or the opening up to women of positions formerly filled only by men; and that was the obtaining of the parliamentary suffrage for women. From time to time, in various countries, legal reforms benefiting women had been effected by parliaments of men elected by men. With the advance of political theory, claims were increasingly put forward that women should have some voice in making the laws by which they were governed, until, in the 19th century, the question of women's parliamentary suffrage was in the forefront of political problems.

In some new countries and in some small countries the change proved comparatively easy. As early as 1776, by an oversight, the women of New Jersey, U.S.A., obtained the right to vote, and they continued to exercise it until 1807. It was in countries where the machinery of an old and complex constitution had to be readjusted to the new conditions that serious difficulties were encountered.

In England the suffrage was not conferred on women until more than a century and a quarter after the publication of Mary Wollstonecraft's manifesto. In 1865, when John Stuart Mill (1087) placed woman suffrage in his election address, the question became one of practical politics, and in 1869, in Mill's famous treatise on the "Subjection of Women," the women's case was put even more cogently than it had been by Mary Wollstonecraft, who was herself in favour of woman suffrage.

Votes for Women

After a long and sometimes embittered struggle the bill establishing the right of women to vote at parliamentary elections became law in 1918. In the same year woman suffrage was established in Austria, Hungary, Czechoslovakia, Russia, and Poland, and in the following year, in Italy. In New Zealand women were enfranchised in 1893 and in Australia in 1902 for the Federal Parliament and between 1894 and 1905 for the states. In the U.S.A. Wyoming was the first state to give the suffrage to women in 1869. The other states followed at intervals and in 1919 an amendment to the constitution made women eligible for the vote.

SOME EARLY WOMEN WRITERS

As for the various accomplishments of women in singing, acting, dancing and other branches of the arts they hold an honoured position. They have not yet produced a supreme musical work, although Dame Ethel Smyth (born 1858) has proved herself not only a composer of vigorous music but also a conductor of considerable power (1876).

From very early times women have attained fame as writers. The love poetry of Sappho (7th century B.C.) and the technical perfection of her verse have never been surpassed and in five poetical contests (Cynthia (6th century B.C.) gained the victory over Pindar. Although it is perhaps in novels and romances, in letter writing and memoirs and in lyrics that women have expressed themselves most completely and most eloquently, they have also achieved notable success in other forms. In a Benedictine nunnery in Germany in the 10th century Hildegard—the strong voice of Gundersheim—as she called herself—composed those amazing comedies which form the connecting link between the Christianized classical drama and the miracle plays, and two centuries later Anna Comnena (1083–1148), the first woman historian, compiled with daughterly bias the record of her father's life and reign.

Later Literary Women

Of women letter and memoir writers Madame de Sevigné (1626–96) is the acknowledged queen, but she has a serious rival in a far earlier writer. Apart from her "Book of Divine Doctrine" which ranks with Dante's "Divine Comedy" as one of the two supreme attempts to express the eternal in the symbolism of a day, the letters that St. Catherine of Siena (1347–80) wrote to kings, popes, cardinals, and other high personages are as remarkable for their literary excellence as they are for their historical interest and spiritual charm. Among

women poets the melody, fervour, and tenderness of Mrs. Browning (1403) are unequalled. That the field of the novel is a fruitful one for women is shown by—to name only a few well-known instances—the delicately wrought irony of Jane Austen (1899), the passionate intensity of Charlotte and Emily Brontë (277), the fragrant charm of Mrs. Gaskell (1400), the deep compassion of George Eliot (1063), and by Mrs. Humphry Ward's firm grasp of intellectual and social problems (1404).

In the Realm of Art

As yet there have been no outstanding women sculptors and few women have attained the highest excellence in painting. Notable exceptions among the animal painters are Rosa Bonheur (969) remarkable for the faultless anatomy of her animals and Lucy Kemp Welch (born 1869) whose paintings of horses show amazing power. Lady Butler (born 1850) (1525) has been described by Ruskin as the first fine picture Raphaelite painter of battle scenes. The same critic loudly applauded the work of another woman artist in a very different line, Kate Greenaway (1846–1901) whose drawings of children will always delight by their quaint beauty of design and charm of draughtsmanship.

Among the portrait painters there have been many distinguished women exponents. Portraits by the Frenchwoman Madame Vigée-Lebrun (1755–1842), are to be found in the great collections of most countries and include one of herself in the hall of the painters at the Uffizi Gallery, Florence. The Dutch portrait painter Teresa Schwartz (born in 1852), is another of the few women who have been invited to paint their own portraits, for this famous gallery. Angelica Kauffmann (1741–1807) had a brilliant contemporary vogue but she is now remembered less for her paintings than as Sir Joshua Reynolds' "Miss Angel." In the wake of the Italian Renaissance appeared such accomplished women portrait painters as Sofonisba Anguissola (died 1626), who became blind, Lavinia Fontana (1552–1614), and Artemisia Gentileschi (1590–1642). It was to the first of these that Van Dyck (1583) referred when he said that he had gained more knowledge of the principles of his art from a blind woman than from many a seeing man.

A Woman Builder of Mansions

Although there is no well known name among women architects, there is one woman who will always be remembered for her amazing zeal as a builder. Elizabeth Talbot, Countess of Shrewsbury (1518–1608), commonly known as "Bess of Hardwick," built no fewer than five

stately mansions. She completed the Elizabethan mansion at Chatsworth, begun by the second of her four husbands, Sir William Cavendish; and pulled down for the present building in 1688, and the other seats to her credit are those of Oldcotes, Worksop, and Belvoir, and Hardwick Hall. The story goes that it had been predicted she would not die so long as she kept on building, and it is strange that when she came to die, it was freezing hard and her builders could not work.

DISTINCTION IN SCIENCE

The remarkable achievements of such investigators as Madame Curie (391) and Mrs. Ayrton indicate that science is a field in which women are destined to win wide renown. As yet, however, it is a field that has not very long been systematically worked by women.

There are several isolated instances of women gaining distinction in the exact sciences. One of the earliest is that of Hypatia (c. A.D. 370-415) (1546), the learned Greek maiden on whose story Charles Kingsley (1556) based his well-known romance. She was deeply versed in mathematics and astronomy, and she probably helped her father, Theon of Alexandria, with his commentary on the *Almagest*. Among other women who have made their mark in astronomy are Caroline Herschel (1750-1848) (406), who, besides assisting her brother, herself made many original observations, including the discovery of five comets; Maria Mitchell (1818-99), who became professor of astronomy and director of the observatory at Vassar College, New York, U.S.A., and Lady Huggins, who, after her marriage, in 1873, to Sir William Huggins, actively assisted her husband in his important researches. Though not herself a practical astronomer, Agnes Mary Clarke (1842-1907) did exceedingly valuable work in summarizing and interpreting the results of astronomical research.

Mary Somerville

Another woman who excelled as a scientific writer was Mary Somerville (1780-1872) (1576), whose name is commemorated in Somerville College, Oxford. Her range of knowledge was no less remarkable than her powers of exposition. The French mathematician and astronomer, Laplace (1551) whose *Mécanique Céleste* she popularized as "The Mechanism of the Heavens," declared her to be the only woman in the world who understood his works. In geology, Mary Anning (1799-1847) won fame by discovering the first specimen that was brought into notice of the ichthyosaurus and also by finding the first English remains of a plesiosaurus and a pterodactyl.

Some Women Travellers

Among women travellers perhaps the best-known is Lady Hester Stanhope (979), who for some years exerted almost despotic power over the half-savage tribes on the foothills of Mount Lebanon. This eccentric woman, however, left England less, perhaps, for the love of travelling than to escape from the restrictions of ordinary society and to gratify her taste for governing.

In the days when travelling was still rare among women, the Austrian, Ida Laura Pfeiffer (1797-1855), covered a wide field. She visited Palestine and Egypt, Scandinavia and Iceland, South America, China, India, Persia, Asia Minor, Greece, the Malay Archipelago, Australia, and other places, and wrote interesting records of her travels.

Mary Kingsley (1802-1900), niece of Charles Kingsley, was one of the earliest of scientific women travellers. She had the passion of travel in her blood, for her father, George Henry Kingsley, was a doctor who had adopted foreign travel as his mode of treatment, and, as medical adviser to his patients, had visited most countries of the world. Apart from her services to ethnology and zoology, Mary Kingsley's work resulted in drawing attention to the importance of obtaining detailed knowledge of new fields of trade, and also in alleviating the lot of the West African negro.

The first woman fellow of the Royal Geographical Society was Isabella Bishop (1832-1904) (1522), who made her reputation by the records of her extensive travels in Asia. Among later women travellers the names of Fanny Bullock Workman and Rosita Forbes (1538) are well known.

As Philanthropists and Reformers

In humanitarian work women have long played a prominent if not a predominant part. The woman from whom, perhaps, the widest benefits have flowed is Mary Ward (1585-1645), an English lady who founded a female order modelled on the rule of the Jesuits. Her "Institute of Mary" was the pioneer of all the many institutes of women that devote themselves to good works of every kind. Another notable woman benefactor was the Baroness Burdett Coutts (1814-1906), of whom it may be said that she held her great wealth in trust for humanity. Missionary enterprise, hospitals, industrial homes—to innumerable good causes she held out a helping hand.

In an age when organization was an almost unknown science to the generality of women, Elizabeth Fry (559) was, after John Howard, the most important promoter of prison reform in

Europe. Hannah More (1559), who, almost alone of the Bluestockings, interested herself in the affairs of the outside world, did much to improve the condition of the children in the mining districts of the Mendips. In her efforts to instil the Tory principles of reverence for the British Constitution and hatred of the French, she distributed her tracts and pamphlets with such success that her circulating organization is said to have led to the foundation of the Religious Tract Society. When the sphere of women's work was very limited, Emily Faithfull (1835-95) strove to further the interests of her sex by her writings and lectures. With Ruskin's help, Octavia Hill (1838-1912) (1545) and her sister Miranda (1836-1910) worked wonders in improving the housing of the London poor. For eighteen years, with only a river dividing her from a slaveholding community, Harriet Beecher Stowe (1811-96) (1577) saw much of the horrors of slavery, and in the subsequent quiet of a country town she wrote her famous story, "Uncle Tom's Cabin," which was one of the chief contributors to the anti-slavery movement.

Fabiola's Noble Example

In the essentially womanly domain of nursing the earliest woman of whom we have record is the wealthy Roman lady, Fabiola, who in A.D. 380 founded a hospital in Rome with a convalescent home in the country, and herself became a nurse. Her example was followed by the consort of the Emperor Theodosius I (1580) Ælia Flacilla, who was devoted in her ministrations to the sick. Nursing remained in the capable and organized care of the Church until the Reformation, when in Protestant countries it fell into secular hands and became a more or less menial occupation, followed by women with little or no training or skill. Not until 1830, when the institute for training deaconesses was founded at Kaiserwerth, in Germany, was any improvement set on foot. It was at Kaiserwerth that Florence Nightingale (223) gained her experience. Besides her pioneer work on the field of battle, the "Lady of the Lamp" performed the even more important pioneer work of training nurses at home in time of peace, and it is to her devoted energy and organizing ability that the very efficient modern nursing system is ultimately due.

Handicapped but Triumphant

The names of Laura Bridgman (1829-89) and Helen Keller (born 1880) are memorable in the history of women as revealing the results of modern methods of educating those who are handicapped by the gravest physical disabilities. Both were blind deaf-mutes, but by their own

remarkable natural aptitudes and by the loving care of their teachers, both became women of considerable attainments. Laura Bridgman was the first blind deaf-mute ever to be taught. As for Helen Keller, her case is the most amazing of the kind ever known. Not only did she take the degree of bachelor of arts, but her "Story of My Life" and other books show wide general culture and are admirably written.

WOMEN RULERS

As civilization advances, humanitarianism comes more and more to the front, and this tendency is seen in the characters of female rulers. Antiquity has its Zenobias and Artemisias, who commanded armies and fleets, but in modern times these martial qualities are commonly replaced by gentler traits, and queens come to be known for their compassion for the poor, sick, and oppressed.

The severity of Mary I of England (1315) and Elizabeth (1316) was conditioned by the religious difficulties of the times. Moreover, Elizabeth was cast in so masculine a mould that the most womanly impulse recorded of her is her cry when she heard of the birth of a son to Mary Queen of Scots. The second Mary (1318) was little more than a pale reflection of her husband; but the forbearance of Queen Anne (1320) towards the Duchess of Marlborough and her moderation towards the Jacobites are only two out of many instances of her kindness and consideration for others. Typical modern queens are Alexandra of England (643), whose active interest in countless charities was exemplified by her drives through the streets of London on "Rose Day," and the poetess Carmen Sylva (1147), who visited the peasants in their homes and encouraged native arts and industries.

In so backward a country as Russia extraordinary force of character was demanded of the unimportant German princess who, with no hereditary claim to the throne, became Empress in 1762. Catherine the Great (1231) ruled all the Russias for over thirty years, and succeeded in obtaining the loyalty of the great mass of her people. The Empress Eugénie (55), forbidden by republican officials to pick the violets in the Tuileries gardens which she herself, as empress, had planted, is a tragic symbol of the passing of the imperial régime in France. By her beauty and charm she contributed to the brilliance of the Second Empire, and when the tide of revolution rose she was one of the few who displayed coolness and courage.

Women Warriors

Heroism and fighting qualities have never been the monopoly of man. From the time of

Deborah onwards we find women quitting themselves like men when the occasion demands it. Artemisia, Queen of Halicarnassus and Cos, not only equipped five ships for Xerxes' expedition against the Greeks, but herself fought them off Salamis (480 B.C.) with great distinction. After the battle the Persian king roundly declared that the women had fought like men and the men like women. Artemisia owed her escape to a clever stratagem. When the Athenian fleet was bearing down upon her, the gallant queen, with astonishing presence of mind, began attacking one of her own ships, whereupon the Athenians, thinking from this that she must be an ally, abandoned the pursuit.

Zenobia, Queen of Palmyra

Another woman of antiquity, Zenobia, Queen of Palmyra (1592), was renowned as much for her strength of character as for her beauty. At the critical moment, however, her courage which had brought her within an ace of success, failed her. In attempting to carry out her ambition to make Palmyra mistress of the Roman Empire in the East she defied the Emperor Aurelian (1517), threw off her allegiance to Rome and drew up her army at Emesa (A.D. 271). But when Aurelian had defeated her there and proceeded to lay siege to Palmyra, Zenobia fled, the city capitulated and the proud queen figured in the Emperor's triumph at Rome.

Theodora Defies the Mob

Whatever her shortcomings—and these may have been less than the very corrupt authorities for her life suggest—Theodora, consort of Justinian I (1548) was a woman born to shine in any walk of life. From very humble beginnings she became, when little more than twenty years old, joint ruler of the Roman Empire. As empress regnant she exercised her prerogatives to the fullest extent, herself corresponding with foreign ambassadors, and she gained over her husband that influence which a strong character always exerts over a weaker. The supreme moment of her life came in the year 532, on the occasion of the dangerous Nika insurrection, when the "blue" and the "green" factions of the circus were thundering at the doors of the imperial palace. Justinian was in favour of flight, but this slight, delicate woman indignantly refused to fly, and her firmness and courage won the day.

Boadicea and Lady Godiva

England has her warrior queen, Boadicea (died A.D. 62), who, in revenge for the insults offered to herself and her daughters, led a

revolt against the Romans, slaughtered (according to Tacitus) 70,000 of her enemies and then, in despair at her ultimate defeat, ended her life by poison (1523). In marked contrast with this fierce queen, but no less heroic, was the gentle Godiva (died c. 1085), the beautiful wife of Leofric, Earl of Mercia. Her fame as a religious benefactress is eclipsed by the story of her ride, clothed only in her long hair, through the streets of Coventry, to release poor traders from the bondage of a toll, an episode which though heavily overlaid with legend, may contain a considerable kernel of truth.

British Heroines of Later Days

Flora Macdonald (1722-90) gained fame by helping Prince Charles Edward to escape after Culloden (1554), and the devotion of Lady Harriet Acland (1750-1815) to her soldier husband, whom she accompanied through all the dangers of the American campaign and nursed when he was wounded, forms another brilliant page in the history of the same century. In the following century Grace Darling (811) earned undying glory by her bold sea rescue. Among 20th century heroines are the medical missionary, Lillian Starr (727) whose courage in rescuing a kidnapped English girl in India has become historic, Dr. Elsie Inglis (1485) who ministered with great devotion to the people of Serbia during the World War and Nurse Edith Cavell (1865-1915) whose noble work in the same conflict was ended by German bullets (1526).

Some Heroines of France

To France belongs a heroine who makes a wide and intimate appeal, for of all the noble characters in history Joan of Arc (139) the inspired peasant maiden who gained a throne for her sovereign and perished in the flames through his ingratitude, perhaps most nearly touches the heart. The memory of another Jeanne is kept green by the 'Procession of the Assault,' which still takes place in the French town of Beauvais. In it the women walk in front of the men. In 1472 the troops of Charles the Bold, Duke of Burgundy, were besieging Beauvais, and one of the attacking party had planted a flag upon the battlements. Throwing herself upon the Burgundian, Jeanne Hachette flung him into the moat, tore down the enemy's flag, and by this act of heroism revived the failing spirits of the garrison. Another example of the patriotic devotion of Frenchwomen is afforded by the young Charlotte Corday (895), who rid France of the tyrant whom she regarded as the author of her country's misfortunes.

Amazons and Other Fighting Women

Although it is disputed whether the Amazons really existed organized bands of female warriors are not unknown in history. In the 8th century A.D. the dukes of Bohemia were much harassed by a company of women fighters, the 16th century Spanish traveller, Francisco Orcllana (1562), named the great river of South America the Amazon after a conflict he had with a tribe of savages in which the women fought side by side with the men, and in Africa the female levies long formed the flower of the army of Dahomey.

The Battle of the Camel

From time immemorial Arab women have had a high reputation for warlike courage, and the history of the Arabs abounds in the exploits of women warriors. At the famous Battle of the Camel (A.D. 636) Mohammed's wife, Ayesha (1518), led the charge, and from this episode arose a custom still observed by the Arabs when engaged in warfare. Chanting songs of encouragement for her own tribe and of disparagement for the enemy, a maiden, mounted on a camel, heads the attack. If she is killed or captured the day is lost, but if her tribe gains the victory she rides at the head of the triumph. No less remarkable is the courage of Japanese women. Throughout the records of old Japan we find women fighting bravely by their husbands' sides in battle and *kara kuu* has not been uncommon among women. In modern times General Nogi's wife followed her husband's example when he committed honourable suicide through grief at his emperor's death.

Secluded Women of the East

In Oriental countries women have for the most part been rigidly secluded and hedged in by restrictions. The Japanese woman has few rights, the Turkish woman is penned in the harem, the woman of India lives behind the *purdah*, and in the oldest existing civilization, China, the woman is entirely subject to the men of the household. She has to conform to the so-called 'three obediences'—to her father before marriage, to her husband during marriage, and to her sons in her widowhood. When old, however, she receives considerable respect, and often the mother, or the wife when she approaches old age, actually rules the home. Instances, moreover, are not rare of Chinese women of high rank obtaining great influence in public affairs, and among modern female rulers few have wielded such power—whether for evil or for good—as the redoubtable Empress Dowager, Tsze Hsi (died 1908). Signs, too, are not wanting that Eastern women generally are

now being roused from their long lethargy by the example, if not by the direct teaching, of their sisters of the West. From the year 1844 the throne in the state of Bhopal, in Central India, has descended in the female line, and the enlightened begums of Bhopal, the only female rulers in India, have carried on the task of government with energy and success.

As Inspirers of High Endeavour

It has always been the part of women to spur men on to great achievements. When the lives of famous men come to be examined it is frequently found that a mother, a wife, a sister, or some other woman has been in great measure responsible for their success. As a modern instance of a mother's influence on a son's career, Lord Pirrie (1361) long kept in his pocket a little book containing his mother's maxims.

In Italy of old Dante's mystical love for Beatrice was the great inspiring force of the poet's life (443). Petrarch's Laura was not so much a particular woman as womanhood—woman in the abstract—and perhaps for this very reason the poems he wrote for her still appeal to every lover (1565). Michelangelo's friendship for Vittoria Colonna (1490–1547) brought peace into the declining years of the great master's troubled life (381), and this high souled lady of the Renaissance was the chief inspirer of his poems.

Women's Task To-day

Even though nearly every field of activity is now open to women, "God's law in their nature will always lead the majority of women to the home, to the intimacy of the family life, to motherhood and the duties of rearing children—but with a higher consciousness." From secluded and hampered beings, women are rapidly becoming the accomplished architects of the future humanity. Their task is not destructive but constructive. In the past they have claimed and won rights, and henceforward they are destined to progress by reason of the powers they have gained of self-development.

It is a mistake to regard women solely as competitors of men. That they often vie with men is inevitable, but this is only one phase of their activity. Women's task is not identical with that of men; it can be achieved only by men and women working harmoniously together side by side. By so doing each sex gains in both strength and freedom, and so long as society continues to be based on the family and on the beauty and efficiency of family life, the struggles women have endured and the triumphs they have achieved will not have been in vain.

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THE GLORIOUS COMPANY OF THE TONE POETS

The Contributions of the Musicians to the Happiness of Mankind

IT has been said that "all the arts aspire to the condition of music." Rhythm and harmony are qualities which we feel in poetry and prose, in dancing and acting, even in painting and sculpture, as well as in musical art.

The statement has also an historical bearing. Originally, the word "music" was used to express the higher activities of the mind as opposed to those of the body. Literature, astronomy and mathematics were arts classified by the Greeks under the general heading of "music." It was only very gradually, and comparatively late in the history of civilization, that the art of manipulating musical sounds, both by means of the voice and of artificial instruments, began to develop and take an independent place among the most refined human cultivations.

One reason for this was that sound, considered as a physical phenomenon, puzzled our forefathers much more than, for example, light or heat. It was not so easily comprehensible in relation to the events of everyday life. More often than not it was associated with terrifying, awe inspiring or mysterious experiences.

Sounds that Primitive Man Heard

The caveman heard his own voice reverberate against the walls of his cavern and imagined the advent of an enemy. Other ominous sounds, such as the roaring of wild beasts or of the wind, the rumbling of thunder and earthquakes, or the rushing of water, arrested the attention of early man, and set his heart beating wildly with fear. A loud sound nearly always implied imminent danger, and thus made a direct appeal to man's instinct of self-preservation.

On the other hand, of course, there were sounds agreeable to hear, such as the songs of birds, the gentle sighing of tree branches, the splash of the waves on the sea shore, and, presumably, the curious, expressive sounds made by human beings in their efforts to become articulate and communicate with one another.

The human voice, in fact, was the first musical instrument, and rapid, excitable speech was the original form of song. Inspired by the sight of the sunrise, or by victory over an enemy or the death of a friend, early man burst into spontaneous song or musical lamentation. And as he became more and more aware of the expressive value of the pitch and tone of his vocal organ he varied them in order to accentuate and give point to his utterances. Excitement, whether pleasurable or otherwise, made

him an unconscious artist in the production and blending of vocal sounds.

But before men had discovered the limits of tonal variety in the human voice they learned how to make musical sounds by artificial means. It is easy to imagine how one day a huntsman plucked at the string of his bow and found that the sound so produced was an agreeable one. The addition of other strings and the discovery that each one, of varying length and degree of tension, gave out a different "note," were comparatively simple steps which resulted in the invention of a rudimentary musical instrument of the harp type.

EARLY MUSICAL INSTRUMENTS

This was called by the Chinese the "kin," and by the Hebrews the "kinnor." The early Egyptians invented a number of instruments similar to the harp, some of them approaching the principle of the violin. Wind instruments probably followed much later, since the discovery of a way of producing pleasing sounds by means of an air passage depended more upon scientific knowledge than a chance discovery. The river reed formed the basis of the flute. Drums were early in use in Arabia, as were also rattles, castanets, cymbals and clappers.

Musical instruments were first regarded as adjuncts to the human voice, but there was little realization of the concordance between artificial and the natural sounds. Nor was it known how sounds could be produced in a definite way, so as to make a "pattern" which could be repeated at will. But with the introduction of musical instruments the emotional appeal of music became at once wider and more definite.

Drums and Trumpets

Crude as these early instruments were, the playing of them acted powerfully upon the feelings of the multitude, whether it was to arouse them to martial enthusiasm by the beating of drums and the blaring of trumpets, or to subdue them to reverence for religious truths by the quietening strains of the harp.

Loud, crashing noises accompanied scenes of pagan sacrifice. The plaintive note of the reed soothed the over-wrought or stimulated the jaded. Upon sensitive minds the more refined musical noises had the effect of arousing deep feelings relating to the pathos of man's temporary life on earth, or strange longings for unattainable degrees of happiness. No other art than music—even in its elementary stage of

development—so quickly or so surely unlocked in man the secret, inner recesses of his consciousness.

There was one common quality about all these early musical instruments. The playing of them appealed directly to man's instinctive sense of rhythm. Most early music was simply rhythmical noise accompanying dance or song. Melody and harmony, the two other elements of music as we understand it to-day, were scarcely understood at all.

The Theory of Numbers

Harmony did not come into existence until the mathematical basis of music came to be understood. An important step in this direction was taken by the Greek philosopher Pythagoras (c. 582–500 B.C.), who was probably the first to apply rules to music (1568).

Pythagoras saw that the secret of producing combinations of sound "in tune" lay in the observance of number. His hypothesis was founded on mathematical and philosophical truth.

All is number and concord. Numbers direct and govern the harmony of the universe. Numbers form also the foundation of musical effects. What we hear when a string in motion is a number. In music numbers become resonant; numbers determine the pitch of tones and their interval relations to one another.

The influence of Pythagoras on the growth of musical theory and practice was immense. He made a musical scale and worked out the mathematical proportions of the intervals between the notes. In addition to adding an eighth string to the seven-stringed lyre of Terpander (7th century B.C.) he invented an adjustable instrument called the monochord, by means of which all the more important musical consonances were stabilized.

Early Greek Notation

The Greeks' conception of tonal art, however, was limited by their experience of musical sounds. They understood the differences between tones, but their music stopped far short of what we call harmony. They wrote music, using for their rudimentary notation the letters of the Greek alphabet. This notation expressed the pitch of a note, but not its duration in time. It was based upon the tetrachord, or four-toned succession.

The conductors of the Greek orchestras beat out time by clattering with their feet on the ground. Their sense of time was rhythmic. It is difficult for ourselves, who understand instinctively the importance of time in music, to realize what Greek music sounded like, but we can imagine music in which there was con-

cord between the notes and a rough, un-timed rhythm.

In one sense the mathematical theories of Pythagoras impeded the development of a true musical sense. Those who relied upon the technical method neglected to cultivate the ear, and as the numerical system was still in a rudimentary stage, much confusion and disagreement arose between those who understood concordance instinctively and those who argued from the mathematical position of the notes in the scale.

Harmony and Concordance

About two centuries after Pythagoras, another Greek philosopher, Aristoxenus (b. 354 B.C.), advanced the theory that the ear should be the sole judge of musical correctness. "The soul," said he, "is the tension of the body, and as with stretched strings in harmony and song, so various vibrations, according to the nature and shape of the body, are produced, like unto musical tones." Gradually, as technical knowledge of music advanced, these conflicting theories came to be reconciled.

Earlier ideas about musical concordance reveal the close relationship between archaic music and primitive philosophical or religious conceptions. Thus to the Chinese the whole tones in the scale represented things perfect and independent, such as heaven, the sun and man, while the semitones meant things less perfect and more dependent, such as the earth and the moon. A correspondence between the motions of the heavenly bodies and the rhythm of music was commonly noted by the early Chaldeans, the Egyptians and the Hebrews.

Pythagoras, again, observed a mystical relationship between the seven notes of his scale and certain planets, which gave rise to the expression "music of the spheres."

The Power of Music

There are the legends of Orpheus, Syrinx and the god Pan, all of which gave names to musical instruments, pointing to a widespread belief in the power of music to cure evil or drive away sorrow. An Indian story relates how the young god Krishna was beloved by nymphs and shepherdesses, who vied with each other in the effort to play a new key on their lyres and so win favour.

But the advance of music as an art was tantalizingly slow. Long after the Greek drama had become a perfected art, reflecting like a crystal the highest and clearest ideas of the Greek mind, musical performance remained merely an adjunct to the theatre or to the pagan festival. It played the part of a humble handmaiden to the plastic arts. Its

day was to dawn at a much later stage of world civilization.

During the Middle Ages, when the great artistic impulse originated by the Greeks petered out before the advance of the Christian religion, the slow evolution of music continued in the form of the hymn. The secular forms of music continued to develop, but the main line of artistic progress is to be found in the gradual improvement and organization of church music.

EARLY RELIGIOUS MUSIC

The first definite kind of religious chanting was the Hebrew psalm, which started as little more than a series of recitations or declamations with musical interludes. Two choirs, standing on either side of the Temple, chanted alternate lines until the word *selah* (pause) occurred, when they stopped, and the music restarted.

To the Hebrews we owe a considerable body of melody. When the children of Israel came out of captivity they brought with them a number of musical instruments, some of their own invention and some imitated from the Egyptians. Jubal is described in Genesis as "the father of such as handle the kinnor (harp) and ugab (primitive organ)." It is quite certain that the Hebrews had a musical culture of their own, and it is probable that they were the first people to become musically expressive.

Perhaps it was because the Hebrews worshipped one God, instead of many, like the Greeks, that their music contained more directness of purpose than that of the latter. It was a more conscious channel for the expression of strong religious emotion.

The Psalms of David

Psalmody developed under the guidance of Moses, who instituted singing classes, and other teachers, until, at the time of David (1531), and Solomon (1576) it had become a highly cultivated art. Hebrew music was solemn and dignified in character. It was rhythmical and melodious, but not harmonious.

Wherever there is powerful emotion language tends to become song, and so music soon found its way into the early Christian services. Some of the melodies at first employed were singularly inappropriate, being derived from popular songs sung in the street. These were eliminated from time to time by the early Christian teachers, who realized what a power for good or evil existed in music.

The Hebrew psalms remained as a permanent feature of church singing. "One cannot sing to the Lord," said St. Augustine (1517), "unless he hath God in his heart, and no worthier songs could be found than the inspired Psalms of David."

As the Catholic Church grew in power, attempts were made to improve the quality of the musical element in the services. There was something incongruous about the combination of bad singing with the architectural grace and dignity of the churches. Choirs were trained, and after the Council of Laodicea (A.D. 367) the congregation were not allowed to participate in the singing.

The mode of singing the responses in churches was called antiphony. All the voices sang in the same key, and only one melody was sung at a time. Polyphonic singing, or the correlation of two or more melodies in concordance sung by voices of differing pitch, such as alto, bass, and tenor, did not come into existence until much later.

Antiphonal singing was naturally only capable of producing a limited range of effect. But every effort was made to preserve its purity and form. There was always a danger of the intrusion of heathen melody.

The Ambrosian Chant

St. Ambrose (A.D. 333?-397) was the first great pioneer of Catholic church music (1515). He invented the Ambrosian chant, which was a kind of recitative, with the cadences for the rise and fall of the voice marked in letters. In the Ambrosian scale each syllable had its corresponding tone. It was improved by Pope Gregory I (A.D. 540-604), who widened its range of melodic possibility by adding subordinate tones not restricted to syllables (1542). Gregory also invented a more intelligible system of writing music, consisting of fourteen characters denoting variations of tone. It was called the *neuma* script, and may be regarded as the first system of musical notation.

About the eleventh century organs were widely in use in the churches throughout Europe. Before then the instrumentation was supplied by the bow and the harp. The organ, however, is a very ancient instrument, and early forms of it, derived from the *syrinx* or Pan's pipes, were in use in the fourth century.

A Primitive Organ

The Asiatic ugab was an early form of organ consisting of some ten or a dozen large river reeds of varying length, bound together with thongs or wax. These were affixed to a box into which air was pumped. Once the problem of opening and shutting the tubes had been solved, the organ as we know it to day practically existed. In the case of the ugab this was done by inserting and pulling out strips of wood underneath the reed, thus admitting or cutting off the current of air supplied by the bellows.

The Romans had organs manipulated either by hydraulic or pneumatic power. Under the patronage of the Byzantine emperors the instrument developed a wide range of tone, and it was still further improved by Pope Sylvester in A.D. 1000. A new stimulus to the control of church music was thereby provided.

Hucbald's "Organum" ~

A still more important step in the story of music was the introduction of part-singing. This was brought about by Hucbald (A.D. 840-930), a Benedictine monk of St. Amand, in Flanders. Hucbald invented a system of music-writing called the *organum*, which was a much better guide to the singers than those of Ambrose or Gregory. The words of the song were written within horizontal lines, and clear marks were written over them indicating the pitch of the note. Tones and semitones were shown by means of the letters T and S placed at the beginning of the line.

Hucbald understood something about time, but his *organum* was often harsh and discordant in effect; indeed, it has been described as a "penance for the ear." It must be remembered, however, that the serious purpose of church music was to arouse certain emotions connected with religious worship, and that to produce pleasure was not its primary object.

Germ of Modern Notation

But music that was not beautiful or harmonious destroyed its own ends. "In the church service," said Guido of Arezzo (905-1050), "it often sounds, not as if we were praising God, but rather as if we were quarrelling among ourselves." This Italian monk (1542), also of the Benedictine Order, was more truly a reformer of music method than Hucbald. He transformed the horizontal lines used by the latter into the staff as we know it to-day, and he introduced a twenty-tone scale, based on the hexachord instead of on the Greek tetrachord, and ranging from the low bass G to the high E of a boy's voice. These tones correspond to those of the white keys on the modern pianoforte.

Guido taught his choir boys to sing correctly by selecting a Latin hymn, the first six lines of which began respectively on the first six tones of the scale, and adopting it as a model. The first six syllables of this hymn—Ut (afterwards changed to Do), Re, Mi, Fa, Sol, La, were written under their corresponding tones in other hymns, thus enabling the correct pitch of the tone to be recognized at once. This system is the basis of the sol-fa singing to-day.

"The Father of Music," as Guido was styled,

emerges from the obscurity of musical history as one of the first great men who laid the foundations of modern music. He paid heavily for his enterprise. The success of his theories aroused the jealousy of his fellow-monks at the monastery at Pomposa, where he first experimented with them. After some vicissitudes he was invited by Pope John XIV to come to Rome. He taught the Pope to read music at sight, and was subsequently reinstated in his former position at Pomposa.

Introduction of Triple Time

From the twelfth to the fifteenth century steady progress was made in the art of musical expression and notation. Franco of Cologne (eleventh century) introduced triple time and anticipated many of the laws governing modern harmony. A page of music at this period looked something like the same thing in its present form. Square or lozenge-shaped notes, sometimes marked in red, were placed in position upon a four- or a six-lined staff. Franco himself used or invented four varieties of note—the *maxima* , the *longa* , the *brevis*  and the *semibrevis* .

One of the earliest known pieces of thirteenth-century music in England is the setting of the old Northumbrian round, "Sumer is icumen in," which clearly shows the mensural system of the Middle Ages, and is remarkable for the natural harmony expressed in its composition.

During this process of systematizing religious music there was a vast amount of musical activity outside the churches and quite independent of the scholars and theorists. The common people sang folk-songs, roundelays and ballades; the lover serenaded his lady-love; wandering minstrels sang in the street for profit. In Germany the minnesingers, and in France the troubadours, fed the taste for musical expression (1646).

Development of the Madrigal

Folk-music often reached a high level of rhythmic and melodic quality. The metrical beauty of the songs was reflected in their accompaniment. The madrigal, or shepherd's song, afterwards developed by Palestrina (1563) and the sixteenth-century musicians into classic form, was widely popular.

Just as church music only reached to a high state of perfection by systematic study, so the songs of the wandering minstrels were improved by the application of method. The close relationship between musical and poetical rhythm greatly aided this process. Secular music, being less restricted in style and subject-matter than religious music, afforded greater opportunities for the discovery of new metrical

combinations and the elucidation of yet unknown musical laws.

Harmony was the next step. However harmonious might be the results achieved naturally, there could be no sure way of repeating an accidental effect until the laws of counterpoint were established.

Of the secular musicians who groped their way towards an understanding of true harmony, three names stand out prominently. Adam de la Hale (c. 1230-88) was the most skilful and learned of the Provençal troubadours. He was the first to experiment in the composition of secular part music, and is said to have composed something nearly approaching a comic opera. G. Dufay (d. 1474) eliminated many unharmonic forms from the old music. In England John Dunstable (1400?-53) still further established the rules that made music harmonious in the modern sense.

THE LAWS OF HARMONY

By the beginning of the sixteenth century the laws of counterpoint were fixed. Harmony, the third element in music, which had always been inherent in it, now became something that could be achieved consciously and by means of known laws.

"Counterpoint," as the name implies, means point against point. In the measured music of this period the notes were called points, and the art of counterpoint consisted in arranging one series of points, making up one melody, with others, and in such a way that the playing of them produced harmony.

So powerful a stimulus was given to musical activity by the discovery of counterpoint, that the period of about two hundred years that followed is generally known as the Golden Age of Music. The story of the first great masters of music begins with the sixteenth century. Hitherto even the greatest and most skilful musicians had been severely handicapped through lack of knowledge. But now there sprang into being a great wealth of musical activity, governed by men of all nationalities who were almost as learned in the science of music as they were masters of its practice.

Masters of the New Music

The new contrapuntal art began to flourish very early in the Netherlands. Both the Dutch and Belgian schools profoundly influenced musical education elsewhere. Of the latter, Johannes Okeghem (b. 1425), a pupil of Dufay, was the first to introduce the fugue, afterwards developed by Sebastian Bach. Jacob Hobrecht (b. 1430), the great Dutch master, was so revered for his Masses that the choir of Bruges Cathedral once journeyed to

Antwerp especially to honour him, and a great festival was held to celebrate his musical triumphs. The most brilliant of his pupils, Josquin des Prés (1445-1521), a Belgian by birth, was a prolific composer both of church and secular music. Considered to be one of the greatest composers of his age, des Prés was nevertheless eclipsed by Orlando di Lasso (1520-94), who, although a less fertile melodist, displayed a greater general mastery of music.

The Homer of Music

Pupils of the Flemish masters created the Venetian school (1524-1612), which reached its zenith in the Masses of Giovanni Pierluigi da Palestrina (1526-94). This great composer (1563) stands in relation to the musical achievements of the world almost as does Homer to poetry or Michelangelo to painting. He was one of the first men of outstanding intellectual power and deep capacity for human feeling to master the newly discovered medium of music. His Masses remain unsurpassed in their dramatic rendering of the Passion.

Palestrina was born of peasant parents at the little village at the foot of the Sabine mountains after which he was named. His vocal gifts early attracted attention and resulted in his being sent to Rome, where he studied under the Flemish masters. He developed very rapidly, both as an organist and a composer. In 1551 he was appointed choirmaster at St. Peter's, and three years later he published his first book of Masses. Pope Julius III, to whom these early efforts were dedicated, rewarded the young composer by appointing him a member of the Singers of the Papal College.

Palestrina's Jealous Rivals

With this honour, however, began all Palestrina's troubles. He was already married when the appointment was made, and by law no married man could become a member of the Singers. While Julius III lived the irregularity was overlooked. But the Pope died only five weeks later, and his successor, urged by jealous rivals of Palestrina, enforced the musician's resignation.

For the rest of his life Palestrina struggled against poverty and intrigue. In 1562 he composed three Masses for the approval of the Council of Trent, which had previously censured the prevailing style of ecclesiastical music. The third Mass was selected as being the best. Of this Pope Marcellus III said: "These are the harmonies of the 'new song' which the Apostle John heard out of the heavenly Jerusalem." In spite of this recognition, Palestrina's difficulties were not materially relieved, and he died a poor man.

In the Masses of Palestrina, Catholic Church music reached its highest level. The Protestant Church did not lag far behind. Martin Luther (1483-1546) founded the evangelical style of religious music (1554). He composed many hymns and was keenly alive to the development of tonal art as an accompaniment to religious worship.

Spanish music during the Golden Age was almost entirely religious in character, the chief composers being C. Morales (b. 1550) and T. L. de Vittoria (1540-1605). Among the masters of English music at this time were T. Tallis (1515? 85) (1578), who was one of the first to introduce the violin to England, and W. Byrd (1543-1623), famous as a religious composer. Orlando Gibbons (1583-1625) wrote both secular and religious music. His anthem *O clap your Hands* is a fine example of English polyphonic art.

End of the Polyphonic Phase

Towards the end of the sixteenth century a great many changes took place in the character of music. The cultivation of new musical instruments led to the invention of new music forms, such as the aria, the suite, and the sonata. Orchestration opened up a wider field for the musical composer. The way was being prepared for a new kind of music, less dependent upon religious domination and offering greater possibilities for individual expression.

Men began to see beyond the rather narrow limits of polyphonic art. Moreover, in one sense, polyphony had hampered the full development of musical expression. Its rigid laws obliterated the natural rhythm of spontaneous music. When polyphonic art began to decline, as it did towards the middle of the seventeenth century, the weaknesses of its structure became manifest, and the best musicians of that age endeavoured so far as they could to escape from its rule-of-thumb laws.

The First Monodies

One of the first to react violently against the polyphonic method was the Italian Vincenzo Galilei (1575-1640), who composed monodies to be accompanied by the lute. Galilei was the father of Galileo the astronomer. As a young man he quarrelled with his music master, Zarlino, who wished to train his pupil in the best traditions of sixteenth-century contrapuntal art. But Galilei had studied the old Greek terms, and he tried to imitate them. As is usually the case in such attempted revivals the result was an amalgam of old and new.

Galilei's revival of the solo made the development of dramatic music possible. In 1600 an opera, *Euridice*, composed by Jacopo Peri (1561-

1630) was performed in Florence. Peri was the first to compose music which reproduced as nearly as possible the various modes of speech in everyday life. He employed a strongly individualized dramatic recitative which differed widely from the religious recitative and marked a great advance in the art of musical expression. The actual invention of the operatic recitative, however, is usually ascribed to Emilio del Cavaliere (1550-1599), who also composed the first oratorio.

Development of Orchestration

Another of the great Italian tone poets of this period was Claudio Monteverde (1568-1643), whose opera *Ariana* is said to have "moved all who heard it to tears" (1559). Monteverde developed the resources of the orchestra, using stringed instruments much more than his predecessors. He was the first to introduce dissonances, or "unprepared dissonances," into musical composition, and he invented, among other instrumental devices, the "tremolo" and the "pizzicato." His aim as an opera writer was to bring about a closer co-operation between the action on the stage and the orchestral accompaniment. He succeeded in composing music which helped the audience to understand the emotions of the characters concerned in the play. In his opera *Orfeo* he introduced a duet for the first time.

The Neapolitan School

But the operatic form did not develop quite in the way that Monteverde and his disciples anticipated. Nearly two hundred years later, Richard Wagner (1813-1883) created the "music-drama" of to-day, in which the music faithfully reproduces the dramatic action. Italian opera, under the influence of Alessandro Scarlatti (1660-1725) and the masters of the Neapolitan school, became less a truthful dramatic picture of life than an opportunity for the display of instrumental and vocal effects. This was largely due to the cultivation of the aria or song for a single voice, which, although beautiful and melodious in itself, interrupted the dramatic continuity of the music, and obviously exaggerated the importance of the individual singer.

The opera form, however, even at its worst period of debasement, and when the Italian stage was almost entirely given over to the feats of the virtuoso singer, still provided musicians with an ample means for the cultivation of dramatically expressive music and the development of idiomatic and instrumental dexterity. Scarlatti prepared the way for Handel.

Italian composers, wandering into France,

Germany and England, stimulated operatic composition in those countries. During the whole of the seventeenth century the art of orchestration was steadily improving, and a sustained effort was made to achieve an artistic combination between the choral and the instrumental sides of the new music.

A Talented Scullery Boy

In France opera quickly became a national and popular art form. Jean Baptiste Lully (1633-87) was the first to write original French operas. Although Italian born Lully adopted the French nationality almost from childhood. At thirteen he was employed as a scullery boy in the household of a French family. One day as he was amusing the kitchen folk with his violin playing a wealthy count who happened to be visiting the house overheard him and, instantly recognizing his talent, obtained a position for him in a private orchestra. From thence Lully quickly rose to occupy the foremost place in French operatic art of which he came to be regarded as the real founder.

Lully was not a great musician, but his dramatic sense enabled him to compose operas which satisfied the French interest in action, and he dispensed with the instrumental embellishments and overloaded arias which had made Italian opera resemble the rococo period in architecture. On the other hand he over-emphasized the ballet, which became a hard and fast convention in French opera and to that extent impeded its progress towards the pure form of music drama which was to call forth the greatest efforts of the latter day musicians.

Revival of Sacred Music in England

In England the name of Henry Purcell (1633-85) stands out among the composers of the Restoration period (1660). English music after rising to a very high degree of excellence at the time of Elizabeth, had sunk to insignificance. The Puritans practically crushed church music out of existence. They destroyed organs and burned the best examples of sacred music. Charles II brought back the church choirs and sent one of the most promising of his choristers, Pelham Humfrey (1647-74) to France, in order that he might study the new methods.

Humfrey and his former fellow chorister John Blow (1648-1708) (1523) brought liveliness into the old-fashioned church music although in such a way that its essential seriousness was preserved. They also introduced the new French forms into secular music. But they were both outshone by the

brilliance and originality of Purcell, who not only excelled as a composer of sacred music, but, at the early age of seventeen produced the first English opera of note, *Dido and Aeneas*. Purcell did not live long enough to found a regular English opera. His chief influence was to turn the scale in favour of the Italian rather than the French style of operatic composition. After his death Italian opera became the prevailing vogue in England.

The Era of the Great Composers

Although modern music—that is to say music in which the elements of rhythm, melody and harmony are co-ordinated with a fair amount of skill—began as early as 1600, the era of the great composers starts, as we have seen from the beginning of the eighteenth century. By this time there was a wealth of material and knowledge upon which to draw. Music had risen to the rank of a highly organized, serious and dignified art. Its practice henceforth was to engage the attention of men of the very highest type of mind. In the future not merely a natural musical sense would suffice to make a man a musician. The great composers who followed each other rapidly into prominence from the eighteenth to the end of the nineteenth century were remarkable not only for their emotional and intellectual powers, but for the genius they displayed in the mastery of the complicated laws of music.

Invention of the Pianoforte

The scope of musical composition had widened with the invention of new instruments. The violin in its present form was finally perfected by Antonio Stradivari (1644-1737) (1577) and with its sister instruments the viola, violoncello and double bass made possible such refined forms of musical expression as the suite, the sonata and the concerto. The modern pianoforte made its appearance in 1711 the invention of Bartolomeo Cristofori (1651-1731) but its predecessors the harpsichord, clavichord, spinet and virginal had been popular instruments since the early part of the fourteenth century.

Chamber music, a favourite pastime in the days when instrumentation was limited, became in the eighteenth century, a highly civilized branch of musical art cultivated by musicians who had mastered the technique of one or more instruments. The gradual development of the orchestra with its full complement of strings, wood and brass wind instruments provided the means for the evolution of the sonata form into the symphony, which is the highest form of purely musical expression.

WIDENING THE RANGE OF MUSIC

The two great composers whose names may be linked together as sharing the honour of opening the grand symphony of eighteenth-century music are Johann Sebastian Bach (1685-1750) and George Frideric Handel (1685-1759). Both were men of strong and original genius who found in music a medium now on a level with literature and poetry in its possibilities of expression, but the texture of which was capable of very great improvement. They concentrated their efforts upon the improvement of existing independent musical forms and the creation of others.

To Bach (565) we owe the perfection of the chorale and the fugue. Perhaps no musician has displayed so much agility and prodigality in the manipulation of a wide range of instrumental music. His *Well-tempered Clavichord*, containing forty-eight fugues for the organ, is but one monument to his colossal industry and skill. He wrote one of the most beautiful of modern Masses, that in B minor, and he was also prolific in the composition of secular music for the clavichord, violin and orchestra.

While Bach developed the lyrical character of music, Handel (313) devoted himself to the epic style. Both expressed much the same in different ways. Born within a few days of one another, each had assimilated the same influences and was urged to create music embodying the best thought and feeling of the age. Bach was, if anything, the more deep-thinking of the two, Handel the more capable of profound feeling. Handel cared more for the human voice than Bach, whose whole life was devoted to the perfecting of instrumentation.

Handel's Prodigious Labours

Handel's musical genius was essentially dramatic. He composed little else than operas and oratorios. But in these spheres his labours were prodigious. His earlier operas, *Almira* (1705) and *Nero* (1705), revealed the combined influences of French and German models. *Rinaldo* (1711) was Handel's first opera composed to an English libretto, and was completed in a fortnight. It was followed by fourteen operas specially composed for the Royal Academy of Music, of which institution Handel was the director.

But it is as a composer of oratorios that Handel is chiefly remembered, particularly in England, the home of his adoption. His inheritance of the German mastery of the choral medium, combined with his gift for dramatizing the passions, enabled him to compose oratorios which are, in a sense, music dramas, for there is

expressed in them the conflict of character and circumstance, which is the essence of drama. Listening to *Esther* (1720), *Israel in Egypt* (1739) and *The Messiah* (1742), we live through the stories which they tell and also feel the deep religious motive which inspired their composer.

In Germany and Paris, meanwhile, serious opera had declined owing to the persistence of a debased Italian style. Bach, as we have seen, had no dramatic side to his genius. There was a lively school of comic opera based on French models, but this led rather to the degeneration of music as an independent medium than to its progress on the broad lines indicated by the pioneers of the new era.

The Reform of Opera

The next great composer to sense the drift of musical art in the operatic form and to realize the importance of a new development was Christoph Willibald von Gluck (1714-87), whose operas *Orfeo ed Euridice* (1762), *Alceste* (1767) and *Armide* (1777), gave rise to a heated critical controversy in France where they were first performed. Gluck commenced his musical career as a fiddler at public fairs, and owed his musical education to the interest of Prince Lobkowitz of Bohemia. He quickly developed a facility in the composition of operas in the Italian style, and, after a visit to England, in the Handelian manner; but it was not until comparatively late in life that he made the important discoveries, both about his own gifts and the theory of music-drama, which led to his fame.

Gluck instituted a still closer relationship between the music and the libretto. Reform was much needed, for in the degenerate style of Italian opera the music constantly distracted the attention of the audience from the play by irrelevant embellishments. Gluck saw that the music should help out the words.

I believed that the music should be to the poetry what liveliness of colour and judicious combination of light and shade are to a well-designed drawing, inasmuch as these serve only to animate the figures without improving the outlines. Finally I deemed it necessary to direct a large portion of my endeavours to the attainment of a dignified simplicity, wherefore I always avoided making an obtrusive show of difficulties at the cost of clearness.

While the great opera composers were perfecting the co-ordination of vocal and instrumental music, other musicians devoted themselves to the cultivation of independent musical forms. Philipp Emmanuel Bach (1714-88), son of Sebastian Bach, extended the sonata form and aided its development into the symphony, of which Joseph Haydn (1732-1809) was the first acknowledged master (901).

Haydn composed no fewer than 125 sym-

phonies, containing a wealth of thematic material, as well as his famous choral works *The Creation* (1799) and *The Seasons* (1801). It was he who found out how to combine a number of different movements into one co-ordinated whole, and thus widened the range of emotions which could be expressed musically and independently of poetry. This was a great step forward in the progress of music-drama and the symphonic art.

An Amazing Prodigy

Wolfgang Amadeus Mozart (1756-91), perhaps the most amazing musical prodigy the world has ever seen, composed sonatas after the style of Haydn in his fifth year (1069, 62). But Mozart was destined, during his short and troubled life, to compass nearly every form of musical art.

Like Handel he was essentially a dramatist in music, but his technique was at once richer and more varied, and he brought humour into the range of the finest musical expression. His most famous operas, *The Marriage of Figaro* (1786), *Don Giovanni* (1787) and *The Magic Flute* (1791), far excelled those of his predecessors, both in wealth of melody and musical characterization.

Hitherto opera composers had announced their characters by means of pronounced chords, which were repeated at each reappearance. But in the case of Mozart's operas each character has his or her particular pattern of music throughout, which is woven into the fabric of the whole with consummate skill. Mozart also invented the "ensemble," which made it possible for four or more characters to express themselves dramatically at the same time, thus emancipating music-drama still further from the restrictions of poetry or the ordinary drama.

Growth of Polythematic Music

Just as Palestrina brought to its full fruition the old contrapuntal art of the sixteenth century, so Ludwig von Beethoven (1770-1827) developed the growing mastery of instrumental and polythematic music during the eighteenth century to its fullest extent (61). The arts of the sonata and the symphony reached to their highest pinnacle in the lofty conceptions and executions of the great tone-poet who, in his later years, could not hear his own melodies. But Beethoven really stands by himself. In grandeur of style, nobility of purpose and musical energy, he towers above the little masters of the school as did Shakespeare and Dante above their contemporaries in the poetic art.

The universality of Beethoven's genius expressed itself in a variety of forms. His work

is usually divided into three periods. The youthful period (1795-1803) comprises the bulk of the sonatas for pianoforte or violin; during the middle period (1803-13) six of the symphonies were composed, including the "Eroica," and also the famous "Kreutzer" sonata for pianoforte and violin. The last period (1813-27) includes the music to Goethe's "Egmont," the 7th, 8th and 9th symphonies, the Mass in D and the string quartets. The opera *Leonore* and the oratorio *The Mount of Olives* belong to the middle period.

Beethoven's "Natural Law"

Beethoven is the ideal composer. He fulfils all the promise of music since its first beginning, and reaches out towards that unexplored region of achievement which is the unknown future of music. Perhaps the most remarkable aspect of his genius is the fact that, although revolutionary by nature, he upset no musical tradition and made no epoch-making musical discoveries. The "natural law" of music was his guide, and his creative energy remoulded the existing forms into a myriad new shapes. He was the first to show how an elaborate symphony could be developed from a single motive. Just as Shakespeare could take a single thought and build upon it an all-embracing drama of human life, so Beethoven could weave out of one note a complexity of musical themes illustrating the whole gamut of man's emotional experience.

THE ROMANTIC MOVEMENT

Although Beethoven founded no school, music could never be the same again after the broad sweep of his genius had subsided. The composers who followed him could not imitate his style because it was too intimately related to his personal character; but they emulated his power and command of the whole range of musical expression. In the sphere of vocal music Franz P. Schubert (1797-1828) poured forth melodious songs and composed significant symphonies (1491). A new group of operatic composers sprang into prominence, showing a strong romantic tendency in their compositions. Luigi Cherubini (1760-1842) revived Italian and French opera, crystallizing the revolutionary principles of Gluck into classic form (1528), and Georg Joseph Vogler (1749-1814) (1584) and Antonio Salieri (1750-1825) supported him. Germany produced in Ludwig Spohr (1784-1859) (1576) and Karl Maria F. E. von Weber (1786-1826) (1587) operatic composers in whom the new tendencies were pronounced.

Weber is usually regarded as the founder of the "romantic" opera, so called because its adherents selected their subject matter from stories of the past which had acquired a powerful

hold on the national imagination. Thus, in his opera *Evryanthe*, Weber recreates the spirit of mediæval chivalry. Giacomo Meyerbeer (1791-1864) developed the romantic opera into that more flamboyant version of it which is called grand opera (1558). Spohr stands out as a composer of romantic music in the non-dramatic sphere.

The Grammar of Music

Beethoven had realized that music could be made the medium for the expression of personal as well as of abstract feeling. The earlier musicians had really been trying to speak without a proper language. As the grammar of the language gradually developed, it became more and more possible to express highly individual emotions. One of the first to cultivate the musical expression of private moods and individual sentiments was Felix Mendel-schön (1809-47), whose *Songs without Words* were composed with such skill that words were unnecessary to convey the sense of what was in the composer's mind. Within severe limitations Mendelssohn (1321) developed pure musical expression to a refined pitch.

The middle period of the nineteenth century is associated with a number of tone poets who, each in his way, contributed to the increasingly various volume of music. The eccentric genius of Robert Schumann (1810-56) was expressed at its best in the vein of brilliant fantasy (1239). Frédéric Chopin (1810-1849), limiting himself to compositions for the pianoforte, created poetic melodies unsurpassed for delicacy and refinement (731). Another great master of the pianoforte, both as interpreter and composer, was Franz Liszt (1811-86), whose wonderful Hungarian rhapsodies occupy a unique place in to al art (397). Liszt is said to have been spurred on in his ambition to become the greatest pianoforte player of his day by listening to the violin performances of Niccò Paganini (1781-1840), the most remarkable instrumental virtuoso of the era (1533).

A Revolutionary Composer

Hector Berlioz (1803-69) reinfused life into the opera and carried romanticism to its extreme limits (1520). The novel and daring musical effects employed by him foreshadowed the achievements of a still more revolutionary figure. Richard Wagner (1813-83) (147), dominates the musical world of the nineteenth century as Beethoven did that of the eighteenth. A romantic idealist, his passion for the reform of the opera led to one of the greatest controversies in the history of music.

Wagner's lifework consisted in the liberation of the opera form both from the affectations

and inconsistencies of the French style and the shallowness of the Italian school. He created the modern form of music-drama, in which the libretto and the music are so closely adapted to each other that the result is complete unity. "The traditional opera," he wrote, "is a error; for in this form of art a means of expression (music) appears as an object, while the object of expression (the drama) appears only as a means."

Musician and Poet

Wagner wrote the librettos of his own opera and was almost as great a poet as he was a composer. He also wrote widely upon musical subjects, defending his theories and establishing new laws. His first opera, *Rienzi* (1837), was conceived in the existing style of French grand opera. It was followed by *The Flying Dutchman* (1843) and *Tannhäuser* (1844), in which Wagner's revolutionary principles first became noticeable and aroused a storm of critical opposition.

Fully aware, as is the case with all great minds, that he was destined to influence his age deeply, Wagner ignored the attacks upon him and, despite the sordid poverty to which he was several times reduced, developed his theories in *Lohengrin* (1848), *Das Rheingold* (1854), *Die Walküre* (1856) and *Tristan und Isolde* (1857). In these music-dramas Wagner first began to treat the old northern sagas and his absorption in the legendary tales of old Germany provided him with the material for his magnificent tetralogy, *Der Ring des Nibelungen* (1869), and *Parsifal* (1882).

Marvellous Flights of Melody

Wagner was not a great man of the type of Beethoven. His genius lay in his individuality rather than in universality. In mastery of the resources of the fully developed orchestra he stands alone. Whatever may be said for or against his conception of music-drama he achieved marvellous flights of poetic melody and tremendous crises of dramatic music. Wagner's method was at once polyphonic and polythematic. In fact he made his own laws, evolving them from that inward sense of harmony which probably existed in mankind from the beginning of time, but which only became articulate after centuries of effort and the laborious cultivation of musical means.

Intense individuality continued to be the keynote of nineteenth-century music. The unsuccessful rival of Wagner, the Russian Anton Rubinstein (1829-1894) composed many striking melodies, but his operas failed through lack of sustained power of execution (1571). Neils Wilhelm Gade (1817-90) founded the

Scandinavian school of music, deriving his inspiration from ancient folk-music. In Switzerland, Joachim Raff (1822-82) produced a masterpiece in his symphony *In the Forest*, and much other music that bore signs of an harassed disposition and unfortunate circumstances. The ultra-modern school of romanticism in France found its most advanced exponent in César Franck (1822-90), whose operas and symphonic poems are full of musical extravagances (1539). Frederick Smetana (1824-84), born in Bohemia, was the most pronouncedly Wagnerian in his musical theory and practice.

National Music

Another Bohemian, Anton Dvorak (1841-1904), displayed great wealth and freedom of ideas in chamber and Church music (1534). He resembles in many ways Russia's greatest musical genius, Pyotr Ilych Tchaikowsky (1840-93), whose symphonies, sometimes full of turbulent energy and joy in life, at other times informed by deep melancholy and pathos, expressed the very soul of the Russian people (1581).

In Norway, Edvard Grieg (1843-1907) (1494), composer of weird, intensely national music, stood out as the most original musician in that country since Gade. But the composer who approached nearest to the greater masters towards the end of the nineteenth century was Johannes Brahms (1833-97), whose *German Requiem* is generally considered to rank with Beethoven's Mass in D (1237). In his other compositions, which were mainly songs and pianoforte suites and symphonies, Brahms expressed the classical revival in Germany as against ultra-romantic tendencies.

THE ORATORIO IN ENGLAND

British composers of this period were mainly concerned with the improvement and development of Church music and the oratorio. Prominent among them were Henry Smart (1813-79), Sir George Alexander Macfarren (1813-87), Sir William Sterndale Bennett (1816-75), Ebenezer Prout (b 1835), Sir John Stainer (1840-1901), Sir Walter Parratt (1841-1924), "Master of the King's Music," and Sir Charles Villiers-Stanford (b 1852) (1576). The prevailing taste for operettas and cantatas was fed by Alfred Cellier (1844-91) (1526), Sir Alexander Campbell Mackenzie (b 1847) and Sir Charles Parry (1848-1918) (1564), while Sir Arthur Sullivan (1842-1900) (1405) delighted London theatre audiences with his operas composed to the witty, winsome librettos of Sir W. S. Gilbert (1405), and also composed admirable Church music.

English interest in Serious Music

The performance of Sullivan's music to *The Golden Legend* (1886) marked the beginning of a revived interest in serious music among English people. Sir Edward Elgar (b 1857) (1535) reached a very high level with his oratorios *The Light of Life* (1896) and *The Apostles* (1903). In the lighter vein Samuel Coleridge Taylor (1875-1912) composed *Ballades and Humoresques* and *Hauatha*, and Edward German (b 1862) achieved popularity with his incidental music to Shakespeare, operas and pianoforte suites (1540).

Meanwhile, in Italy, the traditional opera form had been given a new lease of life by Giuseppe Verdi (1813-1901), whose operas *Rigoletto* (1851), *Il Trovatore* (1853) and *La Traviata* (1853) were rich in dramatic vitality (483). Further developments in the renewed growth of Italian opera were the *Cavalleria Rusticana* of Pietro Mascagni (b 1863) and the *Il Pagliaccio* of Ruggero Leoncavallo (1858-1919).

Gounod's Rich Harmonies

Since the time of Meyerbeer (1558) grand opera in France had languished. It became active again with the *Sappho* and *Faust* of Charles Gounod (1818-93), who afterwards devoted himself to sacred music (1496). *Faust*, with its rich harmonies and lyrical beauty, is justly regarded as a unique *tour de force* in the field of opera. It provided a new model for those who were neither wholeheartedly Wagnerian in their attitude towards musical drama nor slavishly attached to the conventional grand opera.

The end of the nineteenth century in France saw the rise of many composers of brilliant and original talent. The striking orchestral effects employed by Camille Saint-Saëns (1835-1921) were best exhibited in his opera *Samson et Dalila* (1871). Georges Bizet (1838-75) died a few months after producing *Armen* (1875), an opera of outstanding quality and rich in promise. Clement Philibert Leo Delibes (1836-91) applied all the refinements of modern instrumentation to the modern ballet, and Jacques Offenbach (1819-80) created the French burlesque opera (1562).

It was not until music had reached a high degree of technical perfection that the great vocal and instrumental performers made their appearance. Jenny Lind (1820-87), probably the world's most wonderful singer, combined in her art all the efficiency of the virtuoso with a sincere emotional force (1153). Other great singers of the nineteenth and early twentieth centuries were Adelina Patti (1843-1919).

(1564), Nellie Melba (b. 1859) (1557), Luisa Tetrazzini (b. 1874) (935), Enrico Caruso (1873-1921) (649), Clara Butt (b. 1873), and Amelita Galli-Curci (b. 1889) (815).

Instrumental Performers

Many of the composers already mentioned were brilliant performers on the piano, but the first virtuoso pianist was Sir Charles Hallé (1819-95), who, although German born, passed most of his career in England (1543). Among many other famous pianoforte players, men who were musicians in the widest sense of the word, although they specialized in one form of instrumental art, were Vladimir de Pachmann (b. 1848), Emil Sauer (b. 1862) (1572), Moritz Rosenthal (b. 1862), and Ignace Jan Paderewski (b. 1859) (229), the last-mentioned still holding his place as a supreme master of the keys.

Giovanni Battista Viotti (1753-1824) (1584) founded the modern school of violin-playing, of which the chief later representatives were Nicolo Paganini (1784-1840) (1563), Ludwig Spohr (1784-1859) (1576), Karl Joseph Lapinski (b. 1790), Ole Bull (Norway) (1810-80) (1525), Joseph Joachim (1813-1907) (1548), generally regarded as the king of modern violinists, Eugene Ysaye (b. 1858) (1592), and Fritz Kreisler (b. 1875).

The achievements of more recent music are too various for classification. Perhaps the most pronounced fact about music to-day is the extent to which it is practised and appreciated by the peoples of all nations. Music, from being a primitive expression of crude emotion, has

become a highly cultivated language which all may learn to speak and understand. The great composers left behind them a heritage of organized harmony and melody which lies as a solid basis for fresh experimentation and ever more complex and effective tonal associations.

Growth of Musical Education

If the twentieth century has not yet produced a great thinker in music such as Beethoven, it is full of minor triumphs of the musical art, and it has seen a growth of musical education and a development of instrumental skill beyond all previous ages. But for the extraordinary proficiency of modern orchestras trained by such masters of the baton as Hans Richter (1843-1916), Arthur Nikisch (b. 1855) and Sir Henry Wood (b. 1869), the great advances in mastery of orchestral resources achieved by Richard Strauss (b. 1864) would not have been possible.

Music, in fact, is still a young art, and whereas it is possible to look back in history and point to periods when the arts of painting, sculpture and the drama reached a higher degree of excellence than they do to-day, in the case of music the groundwork is but recently completed, and the resources, although deeply probed here and there, have yet to be thoroughly explored. While we glory in the possession of the masterpieces of a Palestrina or a Beethoven, just as we do in those of a Sophocles or Shakespeare, we may yet look forward to harmonies beyond the conception of the former, and to a musical language capable of expressing as much as if not more than the poetic rhythms of the latter.

A CHRONOLOGICAL HISTORY OF MUSIC

EARLY MUSIC

Name	Date	Nationality	Work
JUBAL	Unknown date	Hebrew	Inventor of the harp.
DAVID	About 1000 B.C.	Hebrew	Psalmist and founder of Temple music.
TERPANDER	c. 680 B.C.	Greek	Increased strings of the lyre from four to seven.
PYTHAGORAS	c. 540 B.C.	Greek	Established mathematical basis of music (music by rule).
ARISTOXENUS	b. 354 B.C.	Greek	Founded harmonists' school (music by ear).
PTOLEMY	A.D. 130	Greek	Reformed Greek modes and prepared the way for ecclesiastical music.
ST. AMBROSE	A.D. 333-397	Roman	Inventor of Ambrosian chant — first Catholic Church music.
POPE GREGORY I "THE GREAT"	A.D. 540-604	Roman	Reformed Catholic Church music. The Gregorian chant. Invented "neuma" script, early musical notation.
ALFRED THE GREAT	A.D. 871-901	English	Musical educator and musician.
HUCBALD (Benedictine Monk)	A.D. 840-930	French Netherlands	Inventor of "Organum" system of music. (The polyphonic method.)

Black figures denote pages where further information is given

A Chronological History of Music (*contd.*)EARLY MUSIC (*contd.*)

<i>Name</i>	<i>Date</i>	<i>Nationality</i>	<i>Work</i>
GUIDO OF AREZZO (Benedictine Monk).	A.D. c. 995-1050	Italian	Inventor of solmization system of singing.
FRANCO OF COLOGNE ..	11th century	German	Developed notation and introduced triple time.
ANONYMOUS	c. 1240	English	Rota "Summe 15 icumen in."
ADAM DE LA HALE	b. 1230-88	France	Most distinguished troubadour.
WALTER ODINGTON	b. 1280	English	Composer and musical educator.
JOHN DUNSTABLE	d. 1453	English	} Founded laws of counterpoint.
G. DUFAY	d. 1474	Netherlandish	
HANS NACHS	1494-1576	German	Meister-singer.
JOSQUIN DES PRÉS	1445-1521	Belgian	First great composer of secular and religious music.

THE GOLDEN AGE OF MUSIC

JOHANNES OKEGHEM	1425-1512	Belgian	} Masters of Church music and the madrigal.
JACOB HOBRICT	b. 1430	Dutch	
ORLANDO DI LASSO	d. 1594	Belgian	
JAN P. SWILNINCK	1562-1621	Dutch	} Greatest master of the Mass.
PIERLUIGI DA PALESTRINA ..	1524-94	Italian	
ADRIAN WILLAERT	1480-1562	Dutch	} Venetian school.
ANDREA GABRIELI	b. 1510	Italian	
CLAUDIO MERULO	1533-1604	Italian	} Church composer.
LUCA MARFANZIO	1550-99	Italian	
C. MORALES	b. 1550	Spanish	} Church composer.
T. L. DE VITTORIA	1540-1605	Spanish	
MARTIN LUTHER	1483-1546	German	Reformer of Protestant Church music.
HANS LEO HASSLER	1564-1612	} German	} Masters of Church choral music.
MICHAEL PRATORINS	b. 1571		
G. AICHINGER	1565-1628	} English	} Masters of Church music.
T. TALLIS	1515-1585		
W. BYRD	1543-1623		
ORLANDO GIBBONS	1583-1625	} French	} Composers of Church music.
T. MORLEY	1557-1603		
E. GENET	b. 1520		
C. GOLDMEL	d. 1572		

THE RISE OF DRAMATIC MUSIC

VINCENZIO GALILEI ..	1533-1600	Italian	Composed first monodies.
EMILIO DEL CAVALIERE	1550-99	Italian	Composed first oratorio, <i>La Rappresentazione di Anima e di Corpo</i> (1600).
JACOPO PERI	1561-1630	Italian	Composed first opera, <i>Euridice</i> (1600).
CLAUDIO MONTEVERDE	1567-1643	Italian	Opera-writer and pioneer of modern harmony. <i>Orpheus</i> , <i>Amadæ</i> .
			Introduced the duet.
GIACOMO CARISSIMI ..	b. 1604	Italian	Composer of sacred and secular dramatic music. Developed the aria and recitative.

ERA OF THE ORATORIO AND OPERA

ALESSANDRO SCARLATTI ..	1659-1725	Italian	Founder of the Neapolitan school of opera.
FRANCESCO DURANTE ..	b. 1684	} Italian	} Neapolitan school of opera.
GIOVANNI BATTISTA PERGOLESI	b. 1710		
NICCOLÒ PICCINI	b. 1728		

Black figures denote pages where further information is given

A Chronological History of Music (*contd.*)ERA OF THE ORATORIO AND OPERA (*contd.*)

Name	Date	Nationality	Work
JEAN BAPTISTE LULLY ..	1633-87	b. Italy	Created classic form of French opera.
PIERRE ALEXANDRE MONSIGNY	1729-1817	French	Comic opera.
HENRY PURCELL	1658-95	English	Composed first English opera, <i>Dido and Æneas</i> , and much Church music.
PHILIP HUMBREY ..	1647-74	English	Sacred music.
JOHN BLOW	1648-1708		
CARL HEINRICH GRAUN	1701-59	German	Composers of operas and oratorios.
JOHANN ADOLPH HASSE	b. 1689		

DEVELOPMENT OF THE INDIVIDUAL STYLE

JOHANN SEBASTIAN BACH ..	1685-1750	German	Perfected the chorale and fugue. Well-tempered Clavichord. Mass in B minor.
GEORGE FRIDERIC HANDEL ..	1685-1759	b. Germany	Master of the epic style. Operas: <i>Almira</i> (1705), <i>Nero</i> (1705), <i>Rinaldo</i> (1711). Oratorios: <i>Esther</i> (1720), <i>Israel in Egypt</i> (1739), <i>The Messiah</i> (1742).
DOMENICO SCARLATTI ..	1683-1757	Italian	Pioneers of the sonata form.
EMANUEL BACH	1714-58	German	
C. W. GLUCK	1714-87	b. Germany	Reformer of the opera. <i>Orfeo ed Euridice</i> (1762), <i>Alceste</i> (1767), <i>Armide</i> (1777).
FRANZ JOSEPH HAYDN ..	1732-1809	German	Developed the symphony. Choral works: <i>The Creation</i> (1798), <i>The Seasons</i> (1801).
WOLFGANG AMADEUS MOZART	1756-91	German	First great master of the new forms. Operas: <i>The Marriage of Figaro</i> (1786), <i>Don Juan</i> (1787), <i>The Magic Flute</i> (1791); 49 symphonies, 55 concertos, 22 pianoforte sonatas. Requiem.
LUDWIG VON BEETHOVEN ..	1770-1827	German	Greatest master of the new music. The <i>Kreutzer Sonata</i> (1805), <i>Waldstein Sonata</i> (1803), <i>Eroica Symphony</i> (1806), <i>Overture to Goethe's Egmont</i> (1812), <i>Leonore (opera)</i> (1814), <i>The Mass in D</i> (1823), 9 symphonies (1801-23), <i>The Mount of Olives (oratorio)</i> (1811).

THE ROMANTIC PERIOD

FRANZ SCHUBERT	1797-1828	Austrian	The supreme classicist in the song.
LUIGI CHERUBINI	1760-1842	b. Italy	Composer of French and Italian opera and sacred music.
ANTONIO GIOACHINO ROSSINI	1792-1868	Italian	Operas: <i>The Barber of Seville</i> (1816), <i>William Tell</i> (1829).
LUDWIG SPOHR	1784-1859	German	Distinguished violinist and composer of operas. <i>Faust</i> (1813), <i>Jessonda</i> (1823).
CARL MARIA F. E. VON WEBER	1786-1826	German	Founder of the "romantic" opera. <i>Der Freischütz</i> (1821), <i>Euryanthe</i> (1823), <i>Oberon</i> (1826).
GIACOMO MEYERBEER ..	1791-1864	b. Germany	Developed romantic opera into French grand opera. <i>The Huguenots</i> (1836), <i>Robert le Diable</i> (1831), <i>The Prophet</i> (1843).
FELIX MENDELSSOHN ..	1809-47	German	Great tone-artist. Songs without Words, <i>Overture to A Midsummer Night's Dream</i> , <i>Fingal's Cave</i> , etc. Oratorios: <i>St. Paul</i> , <i>Elijah</i> .

Black figures denote pages where further information is given

A Chronological History of Music (*contd.*)THE ROMANTIC PERIOD (*contd.*)

Name	Date	Nationality	Work
ROBERT SCHUMANN	1810-56	German	Composer of brilliant and fantastic melody.
FRÉDÉRIC CHOPIN	1810-49	French-Polish	Master of the pianoforte: concertos, nocturnes, mazurkas, etc.
HECTOR BERLIOZ	1803-69	French	Composer of operas in extreme romantic vein. <i>Benvenuto Cellini</i> (1853), <i>Faust</i> (1846).
FRANZ LISZT	1811-86	Hungarian	Brilliant pianist, musical educator and composer. Hungarian rhapsodies.
RICHARD WAGNER	1813-83	German	Creator of modern music-drama. <i>Rienzi</i> (1840), <i>The Flying Dutchman</i> (1841), <i>Tannhäuser</i> (1845), <i>Lohengrin</i> (1848), <i>Der Ring des Nibelungen</i> (1856), <i>Tristan und Isolde</i> (1859), <i>Die Meistersinger</i> (1867), <i>Parzifal</i> (1882).
JOHANNES BRAHMS . . .	1833-97	German	Leader of classical revival in Germany. German Requiem; symphonies.
ANTON RUBINSTEIN . . .	1830-94	Russian	Composer of original melodies.
JOACHIM RAFF	1822-82	Swiss	Composer of symphonies "In the Forest."
NILS WILHELM GADE ..	1817-90	Scandinavian	Founder of Scandinavian school based on folk-music.
JOSEPH JOACHIM	1831-1907	Austrian	Brilliant violinist and composer of concertos.
FRIDERICH SMETANA ..	1824-84	Bohemian	Pronounced disciple of Wagner. Composer of symphonic poems.
ANTON DVORAK	1841-1904	Bohemian	Composer of symphonies, sacred and chamber music. Requiem, <i>Stabat Mater</i> ; <i>From the New World</i> (symphony).
PIETRE ILYCH TSCHAIKOWSKY	1840-93	Russian	Composer of intensely national operas, symphonies, etc. <i>Eugene Onegin</i> (1879), <i>The Maid of Orleans</i> (1881), <i>Symphony Pathétique</i> , 5th Symphony.
MODESTE MOUSSORGSKY ..	1839-81	Russian	Born Godounov, opera.
EDVARD GRIEG	1843-1907	Scandinavian	Most original composer of national music. Music to Ibsen's <i>Peer Gynt</i> . <i>Bal-lades</i> , <i>humoresques</i> , etc.

MODERN MUSIC

HENRY SMART	1813-79		
SIR GEORGE ALEXANDER MACFARREN	1813-87		
EBENEZER PROUT . . .	b. 1835		
SIR JOHN STAINER	1840-1901	English	Developed Church music and the oratorio.
SIR WALTER PARRATT ..	1841-1924		
SIR WILLIAM STERNDALE-BENNETT	1816-75		
CHARLES VILLIERS-STANFORD	b. 1852		
ALFRED CELLIER	1844-91		
SIR A. C. MACKENZIE	b. 1847	English	Composers of operettas and cantatas.
SIR CHARLES PARRY	1848-1918		
SIR ARTHUR SULLIVAN	1842-1900	English	Composed music to Gilbert and Sullivan operas (1875-89). <i>The Golden Legend</i> (1886) (oratorio); <i>In Memoriam</i> (overture) (1886).
SIR EDWARD ELGAR . .	b. 1857	English	<i>The Light of Life</i> (1896), <i>The Apostles</i> (1903) (oratorios), symphonies.

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A Chronological History of Music (contd.)

MODERN MUSIC (contd.)

Name	Date	Nationality	Work
SAMUEL COLERIDGE-TAYLOR	1875-1912	African-British	Ballades and Humoresques (Hiawatha scenes).
EDWARD GERMAN	b. 1862	English	Incidental music to Shakespeare. Piano-forte suites.
GIUSEPPE VERDI	1813-1901	Italian	New school of Italian opera. Rigoletto (1851), Il Trovatore (1853), La Traviata (1853).
PIETRO MASCAONI	b. 1863	Italian	Cavallera Rusticana (1890).
GIACOMO PUCCINI	b. 1858	Italian	Manon Lescaut (1893), La Bohème (1896).
CHARLES GOUNOD	1818-93	French	Operatic and sacred music. Sappho (1851), Faust (1859), La Rédemption (1882).
CAMILLE SAINT SAËNS	1835-1921	French	Opera: Samson and Delilah (1892).
GEORGES BIZET	1838-75	French	Opera: Carmen (1875).
CLEMLNT LEO DELIBES	1836-91	French	Ballet music.
JACQUES OFFENBACH	1819-80	French	Created French burlesque opera.
CÉSAR FRANCK	1822-90	Belgian	Le Papillon (1860), La Vie Parisienne (1866), Hulda comic opera (1894).
GUSTAVE CHARPENTIER ..	b. 1860	French	Operas: Louise (1900), La Vie du Poète (1893).
CLAUDE DEBUSSY	1862-1918	French	Operas: Pelléas et Mélisande (1902). Prelude à l'Après midi d'un Faune (1894) (string quartet).
E HUMPERDINCK	b. 1854	German	Fairy opera: Hansel und Gretel (1897).
RICHARD STRAUSS	b. 1864	German	Most original composer since Wagner. Symphonic poems: Macbeth (1887), Don Juan (1888), Tyl Eulenspiegel (1844). Operas: Guntram (1894), Elektra (1910), Rosenkavalier (1911).
ALEXANDER P BORODIN ..	1834-87	Russian	Opera: Prince Igor.
CÉSAR A CUI	b. 1835	Russian	Operas: The Prisoner in the Caucasus (1873), Le Filibustier (1894).
NICOLAS A RIMSKY KORSAKOV	1844-1908	Russian	Operas: The Snow-maiden (1880), Christmas Eve (1895).
GRANVILLE BANTOCK ..	b. 1868	English	Brilliant orchestral pieces.
DAME ETHEL SMYTHE ..	b. 1858	English	Mass in D Operas: The Wreckers, The Boatman's Mate.
DR H WALFORD DAVIES ..	b. 1869	English	Cantata: Herve Riel, chamber music.
EDWARD ALEXANDER ..	1868-1908	American	Most original American composer. Indian Suite (1896), Woodland Sketches.
McDOWELL			Piano pieces, symphonies, concertos, Prelude in C sharp minor.
SERGEI V. RACHMANINOV ..	b. 1873	Russian	

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Books for the Student of Music

The Oxford History of Music
 Dictionary of Music and Musicians Sir George Grove
 The Evolution of the Art of Music Sir C. H. H. Parry
 Counterpoint J. Irlott
 The Threshold of Music William Wallace
 History of English Music H. Dives
 The Story of British Music L. J. Gowers
 The National Music of America and its Sources L. C. Elson
 Musical Instruments: History, Use, and Uniqueness A. J. Hipkins
 Great Musical Composers G. T. Ferris
 Makers of Music R. I. Sharp
 The Growth and Development of Music L. Dickinson
 Style in Musical Art Sir C. H. H. Parry
 The Legends of the Wagner Drama J. L. Weston
 The Perfect Wagnerite By G. B. Shaw
 Wagner's Heroes Maud Constantine
 Wagner's Heroines Maud Constantine
 Musical Studies Lucius Newman

Musical Recollections of the Last Half Century. J. E. Cox
 Musicians and Manners Hermann Klein
 Popular Music of the Olden Time William Chappell
 Music in the House Hullah John Fyke
 Early English Harmony H. J. Woodbridge
 George Frideric Handel Newman Flower
 Life of Mozart Ldy. Holmes
 Life of Beethoven R. Rolland
 Life of Bach C. H. Little
 Mendelssohn W. S. Rockstro
 Chopin as Man and Musician F. Nock
 My Life Richard Wagner
 Wagner as I Knew Him F. Driver
 Life and Letters of P. I. Tchaikowsky R. Kewmarch
 Life of Johannes Brahms L. May
 Rubinstein a Biographical Sketch A. McArthur
 Life of Schumann J. W. von Wiedersheim
 Last the Story of His Life Tede de launfort

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THE PROGRESS OF SCIENCE THROUGH THE AGES

The Unceasing Efforts to Unravel the Secrets of Nature and to Explain Them

THE story of science is that of an unceasing quest for truth of efforts often baffled but never abandoned, to unravel the secrets of nature and to explain them in an ordered manner.

This quest was at first imposed upon man by the necessities of his existence. Beset by dangers and inconveniences arising from ignorance he was forced to acquire knowledge as a means of self defence. He discovered for example how to make a fire and to sharpen a piece of wood to a point so as to fashion a weapon. He became a physician by learning that certain plants possessed healing qualities. In the effort to solve the problems of daily life he developed into an amateur mechanic and student of dynamics.

He also observed natural phenomena, although with an untrained eye. He noted the rising and setting of the sun, the changes in the seasons, the growth and decay of the life around him, the effect upon himself of cold, damp, heat and disease. His conclusions regarding the universe about him were quite erroneous. He thought that the stars were golden nails riveted into a solid crystal dome, and he believed that the earth on which he trod was an endless flat surface.

The store of knowledge which mankind accumulated and passed on to succeeding generations was not at first ordered knowledge, and man did not become a scientist until he had learned how to arrange his knowledge into systems. Deduction was added to observation, and a clear hypothesis took the place of random guess work. Thus arose the various branches of knowledge as we know them to day.

ASTRONOMY THE EARLIEST SCIENCE

The first of these to develop was astronomy (153). It was perhaps natural that the mystery of the heavens should arouse man's speculative instinct. It was in the skies that the early scientists first saw a plan. But man also studied the stars for practical reasons. The solar system was his clock. From rudimentary observation of daily and yearly changes in the appearance of the skies he developed that more complex knowledge of the movements of the planetary bodies which resulted in the formation of the calendar.

As early as the third millennium B.C. it was understood that the planets were not stationary and that some kind of law animated their movement. Chinese astronomers, about this time determined equinoxes and solstices, and

noted the return of comets and eclipses of the moon or sun. Attempts were made to measure the distances between the stars and the earth, but these were grotesquely inaccurate, for it was not yet understood that the earth was a spherical body swinging freely in space.

Aristarchus's Momentous Guess

Babylonian astronomers mapped out the stars about 2800 B.C. Their diagrams and classifications formed the nucleus of the star groupings as we know them to day. It was a Greek, Aristarchus of Samos (fl. 280-264 B.C.), who first said that the earth turned round on its axis once every day and that it travelled round the sun once every year.

The consequences of this tremendous guess were not fully developed for nearly seventeen hundred years when Copernicus (153) swept away the accumulated errors of astronomical research. Aristarchus was unable to form an accurate system upon the basis of his flash of insight and the ingenious systems of Eudoxus (408-355 B.C.) and Hipparchus (about 150 B.C.) (1545) failed because there were not the necessary instruments available with which to verify and correct their assumptions.

The Geocentric System of Ptolemy

Grecian astronomy reached its climax in the geocentric system of Ptolemy (fl. A.D. 127-51) (1588). In some ways the Ptolemaic system constitutes a reversion to ignorance but it was the first fairly credible system based upon observation of appearances. Knowing nothing about the laws of gravitation, Ptolemy assumed that movement on the part of the earth was impossible owing to the action of centrifugal force. He therefore reverted to the idea of a fixed—although spherical—earth, around which the rest of the observed spheres in the firmament swung in unison.

In order to account for glaring anomalies in his mathematical computations of distances and correspondences in time and space, Ptolemy worked out a theory of epicycles and eccentrics, or variations, a proceeding which was very much like a man making incorrect entries in a ledger in order to account for discrepancies in a balance sheet.

But the Ptolemaic system was a perfectly honest attempt to explain the mysteries of the firmament, and it prevailed until the sixteenth century, when Copernicus demonstrated that the earth moves round the sun, a contention which Galileo (153) confirmed.

Hippocrates, the Father of Medicine

While the astronomers were classifying the stars and trying to replace the extravagant myths and suppositions of very ancient times by a system, other men of science were applying common sense and ordered knowledge to subjects closer to the immediate needs of mankind. Biology, or the science of living organisms, found its first exponent in the person of Hippocrates, who was born in Cos (460 ? ~ 357 B C)

Hippocrates (1545) was a professional doctor. He has been justly called "the taker of medicine," and the oath of personal integrity which he formulated is still taken by medical practitioners. The writings of Hippocrates have one in no doubt as to his position as a man of science. It was he who invented the word "hypothesis," which is the very touchstone of scientific method.

Before the time of Hippocrates medicine was regarded as a "black art." Very ancient treatises discovered in Egyptian catacombs show that cures for human ailments were carried out as early as 3700 B C. It is known that the Egyptians used aloes, opium, fennel, lime, soda and iron as drugs, and that they made pills. But they discovered these remedies more by luck than skill, and they believed that the successful results were due to supernatural influences.

The Egyptian god of medicine, I Em Hotep (He Who Cometh in Peace), is described as "the good physician of gods and men, a kind and merciful god, assuaging the sufferings of those in pain, healing the diseases of men, giving peaceful sleep to the restless and suffering." The Greeks regarded medicine as a divine profession, and elevated the chief of their physicians, Æsculapius, into a god.

Physic in the Temples

In the temples of Æsculapius the priests administered medicines, such as lime, hellebore and squills. They combined a fair amount of common sense with a large amount of humbug. Thus they prescribed exercise and plain diet as a cure for indigestion, and massage for sprains, and they understood the principle of counter-irritation. But they also made extensive use of charms and incantations. They had no system of medicine.

The growth of philosophy in Greece extinguished much of the demonology which attributed diseases to "devils," and Hippocrates was a philosopher as well as a doctor. He knew practically nothing about anatomy, but he ascribed the various sicknesses of mankind to disorders of the "humours" of the blood.

bile or phlegm. Harmony of the humours resulted in health, disharmony produced illness.

Hippocrates, like Æsculapius, presided over a temple, but he would have nothing to do with the trickery of his contemporaries. His success as a physician was remarkable considering that he had only the vaguest idea of the internal organs and was unaware, for example, of the existence of such complex disturbers of the "humours" as nerves.

Galen's Researches in Anatomy

Knowledge of anatomy was for a long while hampered by horror at the idea of dissection of the human body after death. The first genuine anatomist was Claudius Galenus (1539) or Galen, who was born of Greek parents about A.D. 130, and passed most of his active, fruitful life in Rome. "I hold," said this great doctor, "that true piety is shown, not in the sacrifice of hecatombs of bulls, or in raising clouds of fragrant incense, but in studying myself to know, and in making known to others, the wisdom, the power and the goodness of God."

Galen dissected animals ranging from the ape to the elephant. He searched in caves for bones and fitted them together. He listened to the sounds made by the heart and the lungs. He puzzled over the problem of paralysis and explained the mystery of voice production. Gradually he formed in his mind a rough model of the external and internal mechanism of a human being. He was aware that all muscular action is controlled by nerves, and that the centre of nervous impulse is in the brain. He thought that the origin of nervous impulse was some kind of spirit, which he called "pneuma."

SCIENCE SUFFERS A SET-BACK

These early steps towards scientific truth were now abruptly checked. During the early part of the Christian era men forgot science and lapsed into barbarism. It was held that the new religion could not be reconciled with scientific research. Once more men thought of the earth as the fixed and stable centre of the universe, as a floor arched over with a crystal line dome. The witch doctor came back with his charms and amulets and devil destroying incantations. After the downfall of Alexandria (A.D. 640) the shadowy outline of the truth sketched in by the Greeks faded away and was lost to men's sight for more than a thousand years.

What did men know before they lost the little knowledge that they had gained? The majority of the sciences had scarcely been born. No one had thought to examine rocks for fossils.

or signs of the earth's beginning. No systematic inquiry into the plant and animal kingdoms had been made. The chemistry of things was a sealed book, and the laws underlying physical motion were locked up. Heraclitus of Ephesus had talked about the atom, but its location was to be postponed until comparatively modern times. Galen's model of man could not be made a working model until Harvey (1544) demonstrated the circulation of the blood in the seventeenth century.

Yet we must not underestimate the value of early scientific research. The modern world is still full of evidences of the industry and scientific zeal of the ancients. Not only the wheel but the road upon which it rolls were inventions preceded by rigorous inquiry into the abstract laws governing their nature. How the Egyptians built the pyramids is not known, but it could not have been by mere guess work. The construction of ships and harbours, majestic temples and strong bridges that have outlasted the ages, show that the Greeks and Romans understood the basic laws of mechanical science if they did not know how to systematize their knowledge. The world of to-day rests upon a solid, broad base of early mathematical knowledge and geometric skill.

Archimedes Discovers a Principle

The inventive spirit, however, does not always coincide with the scientific spirit. Archimedes (287-212 B.C.) (1516), perhaps the most prolific inventor the world has ever seen, thought little of his windlasses and pumps, his endless screw and hydraulic machinery; useful as these were, their inventor knew that they were relatively unimportant offshoots of a greater purpose. More valuable to Archimedes was a simple experiment carried out with the object of detecting alloy in the king's crown. Happening to take a bath while puzzling over this problem, Archimedes noticed that he displaced some of the water as he entered the bath. "I have found it," cried the scientist, and ran through the streets, forgetting, in his enthusiasm, to reclothe himself. By comparing the displacement of water caused by the immersion of the crown with that caused by a piece of gold of its supposed weight, he proved the presence of alloy. More important still, he discovered a principle.

Although the spirit of scientific inquiry slumbered during the Dark Ages, civilization progressed. But whenever real knowledge was needed, it had to be sought in such fragmentary manuscripts as had survived the destruction of the Alexandrian library by the conquering Arabs (A.D. 640). The collection is said to have consisted of 700,000 volumes.

Scientific Work of the Arabs

The Arabs, however, had a natural leaning towards the study of chemistry. It is true that the objects of their researches were mainly fantastic. They sought to transmute the baser metals into gold, and they believed in the existence of an elixir of life. They translated the surviving Greek treatises on medicine and found them useful. It was an Arabian, Achied Bechil, who isolated phosphorus, and Arabian pharmacists discovered nitric and sulphuric acid.

As the Arabs travelled among the races of the East they spread the knowledge which had so narrowly escaped total extinction. But it was not until 1453, after the capture of Constantinople by the Turks, that the works of Hippocrates and Galen were recovered, and nearly another century elapsed before they found their way to Paris, where Jacques Dubois, or Jacobus Sylvius as he was also called (1478-1555), started an anatomical school in 1533.

THE PROGRESS OF ASTRONOMY

Meanwhile the great revolution in astronomical science was pending. Nicolaus Copernicus (1473-1543) (153) a Polish doctor of law, a great scholar deeply imbued with the spirit of the Renaissance and a man of many-sided genius, was approached by the Lateran Council in 1514 for his assistance in the reformation of the calendar. This involved a drastic overhauling of the Ptolemaic system (1712), and the more deeply Copernicus went into its complexities and confusions the more convinced he became that some fundamental error was responsible for them. Nothing would come right because the central assumption was wrong.

Copernicus did not guess the truth himself. He searched in dusty old Greek and Roman manuscripts for the origins of astronomical research, and he found a reference to that early guess of Aristarchus that the earth revolved upon its axis daily and travelled round the sun once every year. He instantly saw that this hypothesis made the solar system one harmonious whole. It was no longer necessary to bolster up the mathematical correspondences between the stars in their courses and earthly events with ingenious variations. Nature and mathematics alike answered to an immutable law.

The system of astronomy which Copernicus outlined in his "De Revolutionibus Orbium Coelestium" was not published to the world until thirteen years after its author conceived it, and then it was ridiculed and condemned alike by the Church, who declared that it was

irreconcilable with the faith, and by other astronomers.

Tycho Brahe and Kepler

Chief among these was Tycho Brahe (1546-1601), who still clung to the notion of a fixed earth. Yet, in his way, Tycho Brahe (154) was an innovator in astronomical science. He added considerably to the catalogue of known stars, including the brilliant Cassiopeia. His measurements of distances were extraordinarily accurate, and he was a prolific inventor and improver of scientific apparatus, such as globes, quadrants and sextants, for astronomical purposes. But his mind was full of mediæval ideas about astrology, and he had not the clear grasp of the heavens as a whole that Copernicus had.

While Tycho Brahe was carrying out his observations at the magnificent observatory which he built at Uraniborg in the island of Hven, there came to him Johann Kepler (1571-1630) (156), the son of an army officer who had turned tavern keeper. This young man had been a potman in his father's tavern. He developed a genius for mathematics and obtained a post as a teacher, but his chief interest was in astronomy.

He believed in the Copernican theory, but he thought that certain of the mathematical calculations were still inaccurate. He was a poor observer, having weak eyes, and he sought out Tycho Brahe in the hope of securing his collaboration. The great Danish astronomer willingly agreed to place his knowledge at Kepler's disposal.

It must have been a strange partnership—the eager young Copernican applying the observations of the Ptolemaic adherent—but it was very fruitful. It was Kepler who discovered the elliptical character of planetary movement and ascribed it to the sun's magnetic attraction. Kepler's laws regarding the relativity of planetary motion made the working out of the Copernican system still more harmonious, but he did not understand the law of gravitation.

Galileo and the Church

In 1608 the telescope was invented, and a year later Galileo Galilei (1564-1642) (156) made one and directed it towards the skies. He detected sun spots, and, by proving that they moved, established the rotary movement of the sun. He also discovered that the planets Venus and Mercury showed "phases," like the moon, and that Jupiter had four satellites. These observations convinced Galileo of the soundness of the Copernican system, and with characteristic aggressiveness he proceeded

to impress his views upon the authorities of his time.

It is difficult for us to understand the dogmatism of the Middle Ages. Philosophy was bound by the often misrepresented tenets of Aristotle (384-322 B.C.) (1756), and no one could be right but Aristotle. Of course, Aristotle very often was right, but the new knowledge that was growing up made it necessary to modify much that Aristotle had said.

For centuries men had believed that the earth was the immutable centre of the universe, and that the overhanging heavens constituted a kind of side-show to the main spectacle of earthly existence. Now Galileo told them that the earth revolved on its axis, just like the other planets, and that, if anything, it was a side-show in the grand scheme of the cosmos.

The Church, which kept a watchful eye upon heresies, not only in religion but in philosophy, was at first amused, then suspicious, and finally angry. Galileo was already an unpopular man. In his youth he had argued with the mathematical professors at Pisa about the Aristotelian doctrine with regard to falling bodies. Aristotle had said that two heavy bodies of unequal weight falling in unison would move with velocities proportional to their weights. Galileo climbed to the top of the Leaning Tower of Pisa, and dropped various bodies of different size and weight. They all reached the ground at the same time.

But we underestimate the narrowmindedness of the Aristotelian professors if we think that they were convinced by this demonstration, which laid the foundation of the science of kinetics, and opened the way to a new era in the civilized world. They still declared that Aristotle was right, and they put every obstacle in the way of Galileo's advancement at the University of Pisa.

The Church placed its interdict upon Galileo's astronomical teachings, and a promise was extracted from him that he would confine his researches to science and not attempt to influence religious ideas. In this respect the Church behaved quite fairly, and it must not be supposed that that body was antagonistic to science; rather, it was the patron of scientific advancement. But it would not brook interference with its doctrines.

Galileo, however, claimed that the Scriptures bore out his findings, and for this heresy he was finally condemned by the Inquisition. By this time he was an old man, and he recanted, but it is said that after he signed the statement denying that the earth moved round the sun he was heard to murmur, "And still it moves."

At this stage in the growth of scientific knowledge it is interesting to note certain correspondences in social progress. Civilization had made giant strides. Mariners had discovered the other side of the globe and brought back from their voyages evidences of strange people and a different fauna and flora. The rich intellectual life of the Renaissance had quickened men's minds for the reception of truth and renewed their curiosity about natural phenomena. In the Church there came about a great schism resulting in an independent reformed church more tolerant in its outlook upon life.

With the disappearance of the superstitions of the Middle Ages of the alchemy and astrology which relied upon magical influences and of the hide bound logic which stiffly interpreted the wisdom of the ancients a clearer mental atmosphere prevailed and it became easier for men of insight to impress their views upon the world.

Old Fallacies Challenged

Even in the mid period of the Renaissance, when hostility to science was still rife, the scientist had thrown down his challenge to accepted fallacies. Francis Bacon (1561-1626) (1411) wrote his 'Novum Organum' laying down new methods of scientific inquiry. The Irish chemist Robert Boyle (1627-91) (1524) was the first to see that substances could be analysed in order to find out their chemical components. Through the genius of William Gilbert (1544-1603) who discovered the force of magnetism, the first steps were taken in the study of electricity. Jean Baptiste von Helmont (1577-1644) a Swiss alchemist of the old school, gave the name 'gas' to the 'spirit' which escaped from burning coal.

William Harvey's Great Revelation

But the most important event in the pre-Newtonian world of science was the demonstration by William Harvey (1578-1657) (1544) of the circulation of the blood. Anatomy had made but little progress since the days of the Greeks. At the school of anatomy in Paris founded by Sylvius (1478-1553) in 1533, the 'inaccurate principles of Galen (1713)' were still taught. Among the pupils at this school however there was a young Belgian Andreas Vesalius (1514-64) (1584) who not content with the limited knowledge and experience available at the classes had fought with dogs for human remains in cemeteries at dead of night. Laboriously and outside the pale of the law this ardent devotee of science built up a new and more accurate conception of human physiology.

THE CIRCULATION OF THE BLOOD

Harvey did not "discover" the circulation of the blood. He was the first to provide a complete and lucid explanation of the circulatory system. Even the Egyptians knew that the blood 'circulated', observation of a cut artery must have taught them so much. Galen was aware that the blood travelled round the body, but his inaccurate ideas about the human organs prevented him from guessing how.

Pupils of Vesalius, Servetus (1511-53), Matthew R. Aldus Columbus (d. 1560) and Andreas Cæsalpinus (1519-1603) had investigated the mechanism of the heart. They understood that the heart pumps blood through the lungs and that in the process the blood was oxygenated and prepared for its passage through the arteries and veins. They had studied the tiny valves in the veins which prevented the blood from flowing backwards.

But these men had a dozen contradictory theories with which to account for the observed facts. Some even regarded the liver as the centre of the circulatory system. It was a common fallacy that the blood in the veins flowed from the heart instead of towards it. Harvey after years of patient investigation of the heart suddenly hit upon its true function. Henceforth, just as the solar system appeared as one harmonious whole after the discovery of its law of movement so the system of blood circulation revealed itself as a rhythmic process beautiful in its symmetry and its inevitable logical working.

Thus two great conceptions of the truth had been wrought out of chaos. Men no longer thought of the earth as the fixed centre of the cosmos and they ceased to think of themselves as creatures stuffed with air and food and organs of vague shape and purpose. It was known that a human being, even in the smallest part of his body reflected the order and harmony of the universe.

Yet a third conception, realized about this time opened man's eyes to the reality of the world of living things invisible to his ordinary power of sight. Through the microscope men first saw the life that termed within life. They were able to see the minute cell from which living organisms grew. The Greek scientists had loosely propounded the theory of cellular origin and applied it to human beings but they thought that the lower forms of life such as worms, shell fish and the like originated spontaneously from slime or mud. It had yet to be shown that worms, as well as human beings, owed their origin to a reproductive process similar in essentials, and that there could be no life without the specialized cell.

Leuwenhoek and the Microscope

The microscope had been invented and used as a novelty for many years before Anton van Leuwenhoek (1632-1723), a Dutch lens maker, realized that it could be vastly improved and applied to scientific research. Spectacle makers commonly made microscopes and magnifiers. It was through one of these that Jan Swammerdam (1637-80) first saw the red blood-cells. Leuwenhoek, however, ground and polished a lens through which it was possible to see very much more.

He examined animalcules in drops of water, the blood in a cock's comb, the skin and hair of small insects and the tissues of plants. He saw and described the minute capillaries through which the blood reaches the veins from the arteries, he saw cells of all kinds jostling each other in the blood-stream, and he recognized clearly that some of these were killers of life while others were savers of life. He was, in fact, the first bacteriologist.

NEWTON DISCOVERS THE LAWS OF GRAVITATION

In the year that Galileo died there was born the sickly, unlikely child who was destined to find the final verification of the Copernican theory. The world we live in to-day is still the Newtonian world, for the recent researches of Albert Einstein (b 1879) (1535) have not yet been sufficiently proved, and it is impossible to foretell the effect of them upon our future ways of thinking. But the theories advanced by Sir Isaac Newton (1642-1727) (737) were at first just as baffling to people of his time as are the principles underlying the new theory of relativity in time and space.

Newton's discovery of the laws animating universal gravitation made the mechanism of the universe as comprehensible as it could be to human understanding. Copernicus and Galileo had left the solar system, as it were, in a state of suspended animation. They described the harmonious movement of the planets around the sun, but they only dimly guessed at the nature of the force which acted as the cement in the vast architecture of the heavens. They knew that when bodies fell from a height they "gravitated" towards the earth. But it had not occurred to them that the "pull" of gravitation was exerted everywhere, and that each of the planets had its own centre of gravity.

The story that Newton was first led to realize the force of gravity by observing the fall of an apple from a tree is probably authentic. But we may assume that he had pondered the problem of gravitation before, and that the object-lesson merely served to heighten his

conviction of the universality of gravitation. It was the mathematical proof of this hypothesis, however, that occupied Newton's mind. For years he was hampered by the inaccuracy of the existing measurements in regard to planetary dimensions and distances in space, but the determination by Jean Picard (1620-1682) of the earth's true dimensions and the correct degree of the meridian in 1672 enabled him to work out his theory.

Newton's Researches in Optics

Newton's character was the reverse of Galileo's. So far removed was the former from the desire to publish his views that, had it not been for the persuasion of his friend Edmund Halley (1656-1742) (1543), the astronomer, the Newtonian hypothesis, as embodied in the "Principia Mathematica," might have been hidden from the world for another generation. It was only when Halley consulted Newton about the course of a comet which he was observing that the latter's astonishing mathematical discovery came to light, and it was the return of the comet on the predicted date, March 12th, 1759, that gave the final proof of Newton's hypothesis.

While Newton gathered the material for the most significant of his researches, he also studied optics and made his famous discovery that the "white" light which reaches us from the sun is not really white at all, but composed of many different hues. His investigations into the nature of refracted light opened up a vista of yet another world governed by mysterious laws, the world of visible and invisible rays hurtling through space.

Before this new and strange world could be explored much laborious work had to be done. Leuwenhoek had shown that the key to creation was to be found in the living cell. Chemists and physicists now sought to unravel the complex molecular formation of substances and to determine the relationship of one kind of substance to another. They investigated the nature of heat and its transforming effect upon liquids and solids. In all these experiments they looked for a plan. Just as the astronomers sought and found harmony in the heavens, so the physicists and chemists discovered its reflection in the nature of organic matter.

Joseph Black's Services to Chemistry

Early in the eighteenth century what was known about chemistry consisted of a variety of observed but unclassified facts. The distinction between quantitative and qualitative analysis was unknown. One of the first chemists to see the necessity for ordering this accumulated knowledge was Joseph Black (1728-99)

(1522), who is considered by many to have been the real founder of modern chemical science.

Black disposed of many rough and ready assumptions. He showed, for example, that the "fiery power" in limestone that has been treated by fire is due to the absence of carbonic acid. He demonstrated this by proving that there was loss of weight on the part of the limestone instead of, as was supposed, gain in weight due to the addition of a mythical substance called "phlogiston." Such an experiment strikes the keynote of scientific analysis—that patient, dogged investigation of *what actually happens* when substances undergo change and develop properties, and the description of it in clear terms.

Another of Black's discoveries was that heat contained or "latent" in a body could be taken up by a liquid and lost again. He also found that different substances required more or less heat in order to raise them to a given temperature, and this difference he called the specific heat of the body.

Pioneer Work of Henry Cavendish

Just as Black tried to determine the nature of substances by splitting them up into their component parts, so Henry Cavendish (1731–1810) (1526) attempted to resolve air and water into their constituents. Cavendish lived a hermit-like existence, devoting his wealth and brains to science. Secluded behind the walls of a rambling old house in Clapham, he worked miracles which would have aroused the envy of the old Arabian chemists. He was the first chemist to manufacture water by the process of electrolysis, and he ascertained what was very nearly the correct weight of the earth.

Cavendish was such a recluse that little was known about his researches until after his death. Sealed packets found in his desk contained facts and figures which testify to an extraordinary insight into chemical problems. He was the forerunner of a group of chemists who finally broke down the old traditions—of Joseph Priestley (1733–1804) (1568), who discovered oxygen, and Antoine Lavoisier (1743–94) (1551) who was the first to describe combustion as a process of oxidation, and of John Dalton (1766–1844) (1531) whose "atomic theory" provided the groundwork for the foundation of modern quantitative analysis.

Dalton's Atomic Theory

Dalton was a poor schoolmaster who had only a back kitchen for a laboratory. He showed how gases expand under heat and discovered that this was due to the activity of the minute particles of matter of which the gas was composed. These particles Dalton described as

atoms, and he believed them to be the smallest possible constituents into which matter is divisible. It is now known that the atom is itself divisible into electrons, and that the electron contains within itself a whole universe of still further divisible particles.

Despite later knowledge, Dalton's atomic theory was a tremendous discovery. By weighing the atoms of different kinds of matter he was able to establish a new method of analysis—the quantitative method. He and his follower, the Swedish chemist, Jöns Jakob Berzelius (1779–1848) (1521), found out the atomic weights of the chief elements, and thus provided a sure mathematical basis for chemical analysis.

The world to which Newton first opened men's eyes is now beginning to be more clearly revealed. The chemists and physicists, following always the fundamental law of harmony that animates all living creation, have found a few terms with which to express its more complex mysteries. Life, or organic matter, springs from the living cell, that mysterious source of energy the architecture of which we understand but the secret of which is yet unknown, and organic matter is composed of atoms held together by inexplicable forces. Some of these forces, however, are beginning to be understood—the forces that produce light and heat, gravitational force and magnetic force. What relation did these forces bear to each other, and what was the real nature of the medium through which they acted?

Faraday and Electro-magnetics

Such questions as these were asked and partly answered by Michael Faraday (1791–1867) (907), the master explorer of the post-Newtonian world of physical forces. All his life Faraday sought to find a relationship between gravity and magnetism and to determine the nature of the medium through which both forces acted. Before he proved the contrary it was believed that electricity was a fluid. Faraday conceived an "electric state," coinciding with the physical lines of magnetic force. After the success of his experiment, by means of which he showed that an electric current can be produced by magnetism if the magnet is in revolution, he became convinced that magnetism and electricity were one and the same thing, and henceforth he sought for a general law acting throughout the universe and linking up magnetic and gravitational force.

In this he was not altogether successful, but, as Lord Kelvin (1824–1907) (421) wrote, "Faraday, with his curved lines of electric force, and his dielectric efficiency of air and of liquid and solid insulators, resuscitated the

idea of a medium through which, and not only through which but *by* which, forces of attraction or repulsion, seemingly acting at a distance, are transmitted."

The practical result of Faraday's discoveries in electro-magnetics was the invention of the dynamo, but his profound theory of electricity had far-reaching effects upon scientific generalization as a whole. He was greatly aided in his researches by the pioneering efforts of Benjamin Franklin (1706-90) (235), the great American scientist, who was the first to show that lightning was an electric charge; by his master and benefactor, Sir Humphry Davy (1778-1829) (908, 910, 911, 912, 1531), whose electrical experiments rank second only to his discovery of nitrous oxide or "laughing gas"; and by many others, including A. M. Ampère (1775-1836) (1515), D. J. F. Arago (1786-1853), and Alessandro Volta (1745-1827) (1584), each inventors and perfectors of the means of producing and measuring electricity.

Wireless Telegraphy and Telephony

Faraday may be regarded as, indirectly, the discoverer of wireless waves. It was while continuing Faraday's researches into the true nature of electrical force that James Clerk Maxwell (1831-79) (1557) proved the existence of electro-magnetic waves acting at a distance. Heinrich Rudolf Hertz (1857-94) (2, 3) succeeded in detecting the waves, and so took the first practical step towards the discovery which Guglielmo Marconi (b. 1874) (1) and others applied to the purpose of "wireless" telegraphy and telephony.

Not until man had studied the innermost secrets of nature as disclosed by the atom and the cell, and discovered some of the laws governing them, was he able to become an accurate observer of the external world. The plan that he had seen mirrored in the skies and in the molecules of matter he now began to discern in the animal and plant kingdoms. He looked upon a flower or an insect with a microscope, searching for the laws of growth and variability that governed them, and seeking to classify the different species according to the laws operating elsewhere.

LINNÆUS AND HIS SUCCESSORS

The botanist and the zoologist began to catch up with the physicists and the chemists. Hitherto naturalists had made rough observations and classifications, and imagined that what they saw and counted was the sum of organic life. Not until Carl Linnæus (1707-78) (991) undertook his journeys in search of new flora and fauna, was the extent and organization of the plant and animal kingdoms realized.

Linnæus succeeded in his great enterprise of classifying the book of nature because his intelligence was in tune with the scientific spirit of the time in which he lived. He was the first to realize that the mystery of reproduction applies equally to plants as to human beings and animals. With this invaluable clue to the variability of species to guide him he was able to revise the existing orders of plants and to divide and subdivide them.

Linnæus based his classification of plants upon the character of stamens and pistils. He discovered that many plants that had hitherto been described simply as species could be split up into many orders having affinities. His labours in the vegetable and animal kingdoms paved the way for such great naturalists as Georges Cuvier (1769-1832) (1531), Sir Joseph Banks (1743-1820) (1518), Lord Avebury (1834-1913) (1243), Erasmus Darwin (1731-1802) (1531), and Jean Fabre (1832-1915) (67), the last of whom was probably the greatest natural observer the world has ever seen, and the most profound in his conclusions.

The work of these men in arranging and describing different species was to be used presently by the great biologists of the nineteenth century to help them to form those theories about natural selection and the origin of species which gave rise to the greatest scientific hypothesis of modern times, viz. evolution.

Realization of a clear scientific distinction between the living and the non-living, the organic and the inorganic, was followed by accurate study of dead things. Rocks, although they have no life, contain history. Things once living were found embedded in them, and life that had died and decomposed formed part of the chemical composition of the earth's crust and core. From the investigation of these phenomena there arose the science of geology.

The tendency of the early peoples was to regard creation as something that began suddenly. They had no conception of gradual processes, of changes so slow as to be imperceptible, and yet pregnant with vast consequences. They thought that the birth or creation of the world and the appearance of mankind were events practically contemporaneous. It was not until the astronomers had determined the shape of the earth and something of the conditions of its existence in space and time, not until the physicists had weighed the earth and the chemists had found out something about the substances of which it is composed, that it became possible to consider its probable age in relation to the existence of mankind.

THE RECORD OF THE ROCKS

The importance of geology as a science can hardly be exaggerated. By its means, and especially by means of that development of it which links on to biological science—palaeontology—the whole history of living things in the past has been laid bare. For as each living creature completed its cycle of life, ending in death either at the hands of an enemy or from natural causes, its remains, embedded in the soft earth, either decomposed altogether or, if the soil was suitable, petrified and endured. Whenever this last process took place the organism in question left its mark upon the earth.

Geologists discovered these fossils, and biologists identified them as links in the evolutionary development of species. But the earth itself left a record of its own history throughout aeons of time and infinitesimally gradual changes of its climate and geography. In the earth's thin crust, which measures only about twenty miles, is contained, strata upon strata, the story of the vast, slow cycles of alternating warmth and heat affecting animal and vegetable life, due to fluctuation in the globe's rotation and elliptical course round the sun, and of other variations resulting from sudden upheavals of its molten interior or changes in tidal action.

James Hutton's "Theory of the Earth"

The first geologist to realize that the study of the earth's surface afforded profound evidence of its general history was a Scotsman, James Hutton (1726-1819), whose "Theory of the Earth," in the classified edition prepared by John Playfair (1748-1819), is still the Bible of geological science. In it Hutton described the processes that led to the formation of the various layers, or strata, revealed in the earth. He showed how similar formations, found in different parts of the world but in the same sequence, pointed to a certain uniformity of cause and effect—the washing away of sediment by water exposing rock surfaces which had gone through vast cycles of change, and which would presently again become sediment and be washed away. In these rock layers he saw a record—broken in places, but unmistakably a record—of a universal sequence due to the action of physical forces in operation since the beginnings of the earth's story, when, molten and vaporous, it swung round the sun at a far greater rate than it does at present.

The Past Revealed by Geology

A more comprehensive survey of cosmic processes, based on Hutton's theories but tracing out in more detail the extremely gradual

changes that had taken place in the earth's surface, was made by Sir Charles Lyell (1797-1873) (1554). The part played by volcanic action in throwing up long submerged rocks was studied by Leopold von Buch (1774-1853), while William Smith (1769-1822) prepared the first authentic geological map and studied the age of fossils.

Modern geologists have divided the history of the earth, as revealed by the study of its surface, into three main divisions, the Palaeozoic, the Mesozoic and the Cainozoic. Many subdivisions mark long periods when the earth was either very warm or very cold, according to its position in relation to the sun. There were times of tropical heat when the surface of the earth was one vast swamp overgrown by luxuriant plants and tall trees which decomposed into carboniferous matter, and there were times when the encroachment of ice curtailed the first instalments of organic life. The earliest period, before the appearance of any sort of life, is termed by geologists the Azoic. In the rocks of this period there is no sign of organic life whatever.

The discoveries and conclusions of the geologists opened up an enormous field of general scientific speculation. Not only was the age of the earth revealed in far vaster expanses of time than had hitherto been imagined, but the position of fossils in its deeper layers of rock proved the existence of many species of once living creatures. The story of the dinosaurs and of other giant reptiles that lived in the warm, Mesozoic period of the earth's infancy, perhaps 200,000,000 years ago, could be reconstructed.

These huge, unwieldy, almost brainless creatures, which wallowed in the marshes and swamps of the prehistoric world and fed upon herbs or their less powerful kind, were not able to survive the period of intense cold through which the earth passed. Gradually they died out, leaving only their bones and footprints as records of their temporary sojourn in an unstable world. They yielded place to other creatures, better able to adapt themselves to the cold and more agile on their feet, the wool-covered mammoth and the hairy rhinoceros.

Age by age species changed in appearance and habits, and new species came into existence. Species that had once been able to live only under water developed lungs and began a new life on shore. A small short-legged animal that used to browse on grass and was rather like a tapir to look at, slowly became longer in leg and tail, fleet of foot, and slenderer in body. It evolved eventually into the horse, probably centuries before man, whose servant it was to become, was ready to utilize him.

Ultimately human remains were discovered, varying in character and so revealing the fact that man, too, has evolved, during millions of years, from a creature distinctly ape-like in appearance, though not of the apes, into his present form.

Lamarck and Darwin Contrasted

One of the first naturalists to study this metamorphism of species and to try to account for it was Jean Baptiste Lamarck (1744-1829) (1551). Fifty years before Charles Darwin (1809-82) (489) startled the world by the publication of his "Origin of Species," Lamarck published his "Philosophie Zoologique," in which he anticipated many of the famous evolutionist's researches, though he differed very much from Darwin in his conclusions.

Darwin said that the survival of some species and the extinction of others was due to a process of "natural selection" or "survival of the fittest." The environment of a particular species determined its fate. If it could adapt itself to its surroundings it survived. If it failed, it died out and a new species took its place. Sexual selection—choice of mates—played an important part in this process, by determining the quality and characteristics of the offspring.

Lamarck's theory was based upon the assumption of a conscious purpose in the organism which secured its survival. He said, for example, that the giraffe gradually elongated its neck through the constant effort to reach the branches of trees, and that this tendency was transmitted to its offspring. Darwin said that the giraffe only survived *because* of its long neck, which enabled it to browse on the tree-tops when no other food was available. He was in agreement with Lamarck, however, in his belief that all species were descended from other species.

The objection to the Lamarckian theory of survival was that it involved the inheritance of acquired characteristics, a doctrine for which no statistical or biological proof has been found. Darwin's hypothesis of an evolutionary process by means of which species adapt themselves, with more or less success to changing conditions, is the more tenable, since it fits in with the observed facts and does not depend upon an unscientific generalization.

Lamarck's Classification of Species

Lamarck's greatest contribution to science was his new classification of species. He was the first to distinguish between vertebrate and invertebrate species by the presence of the vertebral column in however rudimentary

a form or by its entire absence. He was greatly aided in his researches by the systematic work of Count Buffon (1707-88) (1525), who was the first to trace back all organic life to ocean-living creatures of simple organization, such as shell fish and the like, and to other naturalists of the eighteenth century.

EVOLUTION AND THE SCIENCE OF TO-DAY

The nineteenth and twentieth centuries are dominated by the scientific generalization of organic evolution, which Darwin, in co-operation with Alfred Russel Wallace (1823-1913) (489), introduced to the world. All the sciences now group themselves around a central core of accumulated knowledge, and new sciences come into being. Biologists begin to study the problems of heredity and health. The paleontologist considers the true place of man in the scheme of things. Physicists explore the nature of that mysterious energy, "radioactivity," which some substances contain in themselves. Through all these investigations there runs a connecting link. In former times science was studied in water-tight compartments. The alchemist, experimenting with acids and metals, may have hoped to discover the elixir of life or a method of manufacturing gold, but his efforts to benefit mankind were limited by ignorance of universal laws. The modern scientist, whether he be biologist or physicist, whether his study be that of the bacteria that destroy countless lives or the invisible rays that penetrate the ether, is supported in his researches by knowledge of the general principles animating the whole of organic existence.

The principles of the biological evolutionists relate to the origin, growth and development of living organisms. Dimly guessed at from earliest times, they could not be established until centuries of laborious effort had laid bare the fundamental laws of existence. And it is surprising, when we come to catalogue them, how relatively few are these basic laws of which the scientist can be quite sure. The law of planetary motion as revealed by Copernicus, Galileo and Newton, the law of cellular origin as disclosed by Leuwenhoek, the law of natural selection governing the organism—with this handful of comparative certainties the modern scientist advances farther and farther into the world of uncertainties which circumscribes human life. With the little knowledge throwing shafts of light into the oblivion, but revealing at the same time still greater masses of darkness, man ventures into the perpetually widening and deepening unknown.

It is the use that man has been able to make of his small store of knowledge that makes the

story of scientific progress so full of interest. During the past two centuries, representing but a small fraction of man's probable existence upon a planet which is millions of years older than himself, scientific methods have been applied to almost every phase of life. Industry, locomotion on land and sea and by air, the means of communication and of waging war, have all been revolutionized by the power of science. But, above all the problems most nearly affecting the happiness and well being of mankind, the prevention of disease and the cure of unpreventable disease, have been approached and dealt with in an entirely new spirit and in the light of ordered knowledge.

Bacteriology and the Surgeon and Physician

Early in the nineteenth century the science of medicine was still in a comparatively crude stage of development. The surgeons of that time had fairly accurate ideas about anatomy, but they knew very little about the darker forces that ravage mankind, the mysterious, dread diseases which carried off yearly hundreds of thousands of human beings. They could operate painlessly, thanks to the discovery of the anesthetic properties of chloroform by Sir James Simpson (1811-70) (821) but in a great many cases the patient succumbed to blood poisoning afterwards. So frequent were the fatalities following surgical operations that to go under the knife came to be regarded as almost certain death, and even surgeons began to doubt the value of their art.

The reason for this was that the suppuration of a wound was regarded as a chemical phenomenon, and while this view was held there could be no possible avoidance of it or of its inevitable climax—gangrene. No one had realized that suppuration was due to the activity of a micro-organism.

Yet the science of bacteriology had made considerable strides since Leeuwenhoek first saw the tiny disease germs in the blood stream through his microscope. In 1762 a Viennese doctor, Marcus Antonius Plenciz, had propounded the germ theory of disease, and also stated his belief that decomposition was due to the presence of micro-organisms. Another pioneer in this research so vital to medical science, was Agostino Bissi who experimented in parasitic and endemic diseases and traced their origin to the swarms of minute "entities" present in living matter.

Unfortunately the significance of these discoveries only very gradually reached the ear of the ordinary physician and like all such discoveries they were at first regarded as fairy tales. Surgeons continued to use the knife that shut one door to death and opened

another, and physicians bled, poulticed and dosed with but small knowledge of the highly organized enemy that they were seeking to vanquish with hopelessly inadequate weapons. It was not until 1863 that C. J. Davaine (1812-82) and P. F. O. Rayer (1793-1867) isolated and named the first bacillus, that of anthrax, and about the same time Louis Pasteur (1822-95) (821) finally convinced the medical world that disease was another form of organic life.

Pasteur Proves Disease a Form of Life

"Life is a germ, and a germ is life," said Pasteur. He proved this to an audience of distinguished men of science by exhibiting to them a liquid enclosed in a tube from which air had been excluded. This he had preserved for some time, and by all the supposed laws relating to decomposition and "spontaneous generation" the liquid should have "gone bad." But it showed no sign of putrefaction.

"And therefore, gentlemen," said the triumphant experimenter, "I could point to that liquid and say to you 'I have taken my drop of water from the universality of creation, and I have taken it full of the elements fitted for the development of inferior beings. And I wait, I watch, I question it, begging it to recommence for me the beautiful spectacle of the first creation. But it is dumb—dumb ever since these experiments were begun several years ago, it is dumb because I have kept from it the only things which man cannot produce—the germs which float in the air.'"

Thus Pasteur proved that the micro-organisms that cause disease depend for their lives upon certain conditions. He devoted his life to the study of these entities that swarmed and multiplied wherever there was a medium suitable to their existence. He bred them in his laboratory and subjected them to rigorous tests. Some of them, he found, could be killed by boiling or freezing, others hardly withstood extreme temperatures. They varied in form, some being shaped like a rod, others like a corkscrew. The smallest could not be seen under the microscope, yet their existence could be detected by the results of their activity. One kind produced the fermentation in yeast, which is the basis of ale, another attacked the tissues of the human organism and gave rise to typhoid fever.

It was as though a new race had been discovered, a race of Lilliputians, elusive in their habits, mobile and energetic, more often than not the enemy of any other organism which they chose to invade. Their power of multiplication is staggering. A single cholera bacillus, weighing practically nothing, could produce a family, within twenty-four hours, the total

weight of which would be 7,366 tons! No leader of an army of human soldiers could call up reserves so speedily as these messengers of death could duplicate themselves.

Yet without these destroyers of life there could be no life. For bacteria produce decomposition, and it is upon the nitrogenous substances in decaying matter that plants feed. Were it not for bacteria the earth would speedily become choked with lifeless matter. But for the gargantuan appetites of these tiny scavengers there would be no room in the world for healthy life. They remove waste products by the simple process of eating them, and in doing so they provide food for the vegetable organisms upon which we depend, ultimately, for our own food.

Nature made this provision, and she also provided man with the means of resisting premature invasion by the eager, insatiable hordes that feed on his living tissues. In the human body there are certain white blood-cells whose function is to devour and digest bacteria that would otherwise cause disease. These white blood cells have a roving commission. They circulate all over the body, and can even, if necessary slip through the walls of the veins. They scent their prey from afar and rush in thousands to meet and destroy it. In most cases they succeed in their object. But, sometimes, if the general equilibrium of health in the body has not been well preserved, they are not quick enough or numerous enough to conquer the enemy. Then the bacteria triumph and disease results.

Our Debt to Pasteur

The discovery of this marvellous principle in nature and the invention of means to preserve the equilibrium of the body in its perpetual struggle against bacterial invasion was the crowning achievement of nineteenth century science. Pasteur's unrelenting zeal resulted in the establishment of a sound principle of immunity. Inoculation, which Edward Jenner (1749-1823) (1327) had successfully practised in regard to smallpox a century before science was ready for the innovation, became, in Pasteur's hands, an absolutely clean process of wide application. Thanks to the genius of this great bacteriologist, sheep farmers no longer dread the annual toll of death formerly levied by the anthrax bacillus, we need no longer die of hydrophobia, and we may drink milk entirely free from bacteria.

Almost as great a debt humanity owes to Lord Lister (1827-1912) (821), the inaugurator of antiseptic surgery, which banished for ever the dark horrors of the operating-room. The German pathologist, Rudolf Virchow (1821-

1902) (1584), was the first to observe that the invasion of bacteria stimulated a morbid growth of the body-cells. Upon his cellular doctrine modern pathology is mainly founded. Robert Koch (1843-1910) (1332) isolated the tuberculosis bacillus and, by his invention of tuberculin, at first advanced as a cure for the disease, made the diagnosis of it much simpler.

Almroth Wright and Metchnikoff

The discovery by Sir Almroth Wright (born 1861) (1591) of a substance in the blood-stream which helped the "phagocytes" in their task of devouring bacteria by partially digesting them, revealed further fighting forces in nature which could be coaxed into action by the art of the physician. It was thought at first that this substance, which Wright called "opsonin," carried on the battle single-handed, and that the phagocytes merely acted as scavengers, removing the conquered bacteria from the blood-stream. But further researches by the great Russian bacteriologist, Elie Metchnikoff (1845-1916) (1333) showed that the phagocytes really did devour the bacteria, which were, however, rendered easier of digestion by the action of the opsonin.

Mendel and the Study of Heredity

Evolution, as studied in the plant and animal kingdoms, led to that study of characteristics latent in the human species which is called heredity. While Darwin was working out his theory of natural selection, Gregor Mendel (1822-84) (1558), an Austro-Silesian abbot, carried out some experiments in the breeding of peas which resulted in the discovery of the main law of heredity. Unfortunately Darwin did not hear of Mendel's researches. Had he done so, there is no doubt that he would have incorporated them in his general biological theory, for Mendel's law in regard to the inheritance of dominant and recessive characters proved to be of the utmost importance.

Mendel crossed two varieties of the edible pea, namely the "tall" and the "dwarf." The first generation proved to be all "talls." These Mendel called "dominants," while the apparently extinguished dwarfs he termed "recessives." But that the dwarfs were not extinguished but merely latent was proved by the fact that when the talls were allowed to fertilize, talls and dwarfs appeared in the proportion of 3 to 1. Of these, the dwarfs, when fertilized with their like, produced only dwarfs, while of the talls one-third produced talls only and two-thirds produced talls and dwarfs in the proportion of 3 to 1—and so on, dominants and recessives reappearing always in the same proportion.

The conclusion that Mendel arrived at as the result of his researches was that some of the "gametes," or generative cells, were segregated at the first cross-breeding, but that they afterwards reappeared and produced strains in definite proportions. This theory entirely altered previous ideas about the laws governing heredity. Even Darwin had supposed that offspring were "mixtures" of their parents. It now became clear that the real factor in heredity was a substance called the germ plasma, which contained within itself the material for a new individual, which would develop the characteristics of its progenitors according to the Mendelian law.

Weismann's Researches in Heredity

August Weismann (1834-1914) (1587) carried this theory of the germ plasma still farther, and he also showed that at each fertilization a portion of the original germ plasma is set aside, so that in every new member of a species there is one part that is immortal. Thus nature secures an unbroken continuity throughout the ages, and characteristics that disappear for one or more generations are by this means bound sooner or later to recur.

The Founder of Eugenics

By the statistical method, which Sir Francis Galton (1822-1911) (1539), the founder of eugenics, was the first to employ, very rapid advances have been made in the study of hereditary characteristics. Galton's work on the making of composite photographs, revealing pronounced criminal or diseased types of human beings, was followed by further inquiries into the probabilities of human survival undertaken by that master of statistics, Karl Pearson (b. 1857).

We call eugenics a new science, but it is really only the name that is fresh. Science is for ever throwing out new ramifications, to which, for the sake of classification and order, it is convenient to attach a label. By eugenics is implied a later phase of the age-old science of biology, the study of living organisms.

New discoveries are constantly being made, but in many cases these turn out to be verifications of experiments made by the early alchemists and masters of the "black arts." Science slowly transforms dreams into realities, and what was once thought to be "magic" can now be explained in terms of accurate cause and effect. Thus the Arabian chemists suspected all sorts of magical qualities to be hidden in substances, and they tried ineffectually to make them yield up their secrets. They could not succeed, because they did not know the right method.

In the nineteenth and twentieth centuries chemists and physicists began to realize these dreams of the early alchemists. They did not, it is true, actually discover the elixir of life or a method of transmuting base metal into gold, but by constant and accurate inquiry into the nature of substances they discovered more and more marvellous facts about the sources of energy by which we live and the secret springs regulating the elastic and complex mechanism of the universe. Since these discoveries led directly to new means of life-saving and wealth production, it may be said, in a symbolical sense, that modern alchemy has achieved, or rather, is achieving, the goals glimpsed by the ancients.

For example, men had used coal as a source of energy for centuries before they realized the nature of the processes by means of which coal came into being. Now we know that, in a certain sense, coal is stored-up sunlight. For ages before man appeared, the sun blazed down on the earth and ripened vegetation, which decayed and became carboniferous. But in a more literal sense than this, man is learning to make use of the energy that is locked up in the earth.

RÖNTGEN AND THE X-RAYS

In 1892 a German professor of physics, Wilhelm Konrad Röntgen (1845-1923) (1159), while experimenting with a vacuum tube on the conduction of electricity through gases, discovered that certain mysterious fluorescent rays emitted during the process had photographed a key placed inside a book lying on the laboratory bench on to a plate which happened to be standing near. Further experiment showed that the rays had the power of penetrating thicker substances, and that they could be made visible by being brought into contact with crystals of barium platinocyanide. Each ray was composed of electric waves of extremely small length.

Thus, by an extraordinary accident, Röntgen discovered the X-ray, which has proved of such incalculable service to medical science. In the recognition of the nature of the phenomenon which his experiment revealed he owed much to Sir William Crookes (1832-1919) (1159), who was the first to detect the principle of radiation in regard to certain metals.

Finsen's Light Treatment for Lupus

The study of radio-activity developed rapidly. Niels Finsen (1861-1904) (1159), analysing the nature of sunlight, showed that it was composed of three principal rays—red or heat rays, yellow or light rays, and violet and ultra-violet rays. Finsen was the first to discover the

peculiar chemical action of the last named rays, and to apply them successfully to the cure of a deadly scourge of child life, the disease of lupus

The Discovery of Radium

More remarkable evidence of the radio active properties of certain substances was revealed by Marie and Marie Curie (391) who, after years of patient effort, succeeded in isolating radium, the most highly radio active substance known. Sir Ernest Rutherford (b 1871) (1571) and Frederick Soddy (b 1877) were the first to show that the phenomenon of radio activity is due to the breaking up of the minute particles of matter of which the radio active substance is composed, and from their researches arose the study of "atomic" energy.

The atom has not yet yielded up all its secrets but enough is known about its archi-

teeture to make it certain that it contains within itself a miniature universe of still smaller particles, electrons and protons, and that these are held in position by an attractive force similar to that which keeps the solar system in harmonious movement. Further more, into the electrons and protons are packed still more minute worlds.

Thus the scientist is for ever opening doors, only to find further doors behind which lurks the elusive secret for which he seeks—the secret of life itself. Sometimes he seems to be almost on the threshold of knowledge more certain than anything previously revealed, and then some new fact discloses a further baffling mystery. This tantalizing quest of the unknown—and perhaps unknowable—is, after all, but the extreme aspect of the purpose of science, which is to know what can be known, and to marshal that knowledge into comprehensible systems.

A CHRONOLOGICAL HISTORY OF SCIENCE

EARLY SCIENTISTS

Name	Place	Period	Science	Remarks
CHOU KUNG	China	B C 1100	Astronomy	Attempted to measure sun's distance from earth
BLOUSSUS	Babylon	460	Astronomy	Founded astronomical school in Cos, Greece
APISTARCHUS	Greece	280-264	Astronomy	Developed first heliocentric system (earth moves round on its axis and round sun)
EUDOXUS	Greece	408-355	Astronomy	Attempted to reconcile mathematical calculation of solar movement with results of actual observation
HIPPARCHUS	Greece	about 150	Astronomy	Catalogued 1080 stars
PTOLEMY	Greece	A D 127-51	Astronomy	Devised the Copernican system—current until sixteenth century
ARCHIMEDES	Greece	B C 267-212	Physics	Discovered principle of obtaining weight by water displacement
HIPPOCRATES	Greece	460-357	Medicine	The Father of Medicine—diagnosed according to the humours
GALEN	Greece	b about A D 130	Anatomy	Dissected animals and formed rough idea of human anatomy

SCIENTISTS OF THE MIDDLE AGES AND RENAISSANCE

Name	Place	Period	Science	Remarks
NICOLAUS COPERNICUS	Baltic	A D 1473-1543	Astronomy	Revived heliocentric system
TYCHO BRAHE	Sweden	1546-1601	Astronomy	Believed in fixed earth. Anti Copernican. Discovered many stars and improved quadrants, sextants, etc.
JOHANN KEPLER	Germany	1571-1630	Astronomy	Discovered elliptical character of planetary motion. Supporter of Copernican theory.
GALILEO GALILEI	Italy	1564-1642	Astronomy	Demonstrated truth of Copernican theory.
WILLIAM GILBERT	England	1544-1603	Physics	Discovered force of magnetism.

Black figures denote pages where further information is given

A Chronological History of Science (contd.)

SCIENTISTS OF THE MIDDLE AGES AND RENAISSANCE (contd.)

<i>Name</i>	<i>Place</i>	<i>Period</i>	<i>Science</i>	<i>Remarks</i>
FRANCIS BACON	England	A.D. 1561-1626	General Science	Established new method of scientific inquiry. "Novum Organum."
ROBERT BOYLE	Ireland	1627-91	Chemistry	First scientific chemical analyst.
JEAN BALDUSSE VON HELMONT	Switzerland	1577-1644	Chemistry	Named "gas"
JACQUES DUBOIS (SYLVIVS) ..	France	1478-1555	Anatomy	Founded anatomical school in Paris (1533).
ANDREAS VESALIUS	Belgium	1514-1564	Anatomy	Reorganized system of anatomy.
ANDREAS CESAPIO	Italy	1519-1603	Anatomy	Investigated mechanism of the heart
MATTHEW R. COLUMBUS	Italy	d 1560	Anatomy	
WILLIAM HARVEY	England	1578-1657	Anatomy	Demonstrated circulation of the blood.
SIR ISAAC NEWTON	England	1642-1727	Natural philosophy	Discovered law of gravitation and investigated nature of "white" light
EDMUND HALLEY	England	1656-1742	Astronomy	Sponsored Newtonian hypothesis and discovered Halley's comet.
ANTON VAN LEEUWENHOK ..	Holland	1632-1723	Bacteriology	First to make scientific use of microscope
JAN SWAMMERDAM	Holland	1637-80	Bacteriology	First to see red blood-cells through microscope.
HERMANN BOERHAAVE ..	Germany	1668-1738	Medicine	Founder of clinical method

SCIENTISTS OF THE EIGHTEENTH CENTURY

JOSEPH BLACK	England	1728-90	Chemistry	Discovered principle of latent heat and specific heat.
HENRY CAVENDISH	England	1731-1810	Chemistry and Physics	Weighted the earth and split up water by electrolysis.
JOSEPH PRIESTLEY	England	1733-1804	Chemistry	Discovered oxygen
ANTOINE LAVOISIER	France	1743-94	Chemistry	Defined "combustion" as a process of oxidation
JOHN DALTON	England	1766-1844	Chemistry	Established "atomic" theory—quantitative analysis
JOSS JAKOB BERZELIUS ..	Sweden	1779-1848	Chemistry	Developed quantitative analysis.
BENJAMIN FRANKLIN ..	U.S.A.	1706-90	Natural Philosophy	Identified electricity with lightning
SIR HENRY DAVY	England	1778-1829	Physics and Chemistry	Discovered 'nitrous oxide' or laughing gas. Experimented in electricity.
A. M. AMPERE	France	1775-1836	Electricity	Inventors of electrical apparatus.
D. J. F. ARAGO	France	1786-1853	Electricity	
ALESSANDRO VOLTA	France	1745-1827	Electricity	
MICHAEL FARADAY	England	1791-1867	Electricity	
CARL LINNÆUS	England	1707-78	Natural history	Defined electricity as a "medium" and sought to connect it with gravitation.
SIR JOSEPH BANKS	England	1743-1820	Botany	Reorganized botanical classification on basis of sexual characters.
COUNT BUFFON	France	1707-88	Natural history	Pupil of Linnæus.
GEORGES CUVIER	France	1769-1832	Natural history	Anticipators of evolution.
ERASMUS DARWIN	England	1731-1802	Natural history	
SIR WILLIAM HERSCHEL ..	England	1738-1822	Astronomy	
PIERRE SIMON LAPLACE ..	France	1749-1827	Astronomy	Discovered planet Uranus.
JOHN HUNTER	England	1728-93	Medicine	Established "nebular" hypothesis—origin of the planets.
EDWARD JENNER	England	1749-1823	Medicine	Founder of modern surgery.
				Applied principle of inoculation to smallpox.

Black figures denote notes where further information is given

A Chronological History of Science (*contd.*)SCIENTISTS OF THE EIGHTEENTH CENTURY—(*contd.*)

Name	Place	Period	Science	Remarks
JAMES HUTTON	England	1726-1819	Geology	First to realize age of earth and to read record of the rocks.
SIR CHARLES LYELL	England	1797-1875	Geology	Traced gradual changes in earth's surface
LEOPOLD VON BUCH	Germany	1774-1853	Geology	Explorer of volcanoes.
WILLIAM SMITH	England	1769-1822	Geology	Prepared first geological map.
JEAN BAPTISTE LAMARCK ..	France	1744-1829	Biology	Distinguished between vertebrate and invertebrate organisms. His theory of variation in species based on will of the organism.

MODERN SCIENTISTS

CHARLES DARWIN	England	1809-82	Biology	Originated hypothesis of organic evolution.
ALFRED RUSSEL WALLACE ..	England	1823-1913	Biology	
ERNST HAECKEL	Germany	1834-1919	Biology	
JEAN FABRE	France	1823-1915	Natural history	Reclassified species in accordance with doctrine of evolution. "The Homer of the insect world."
LORD AVEBURY	England	1834-1913	Natural history	Pioneer of entomology.
SIR JAMES SIMPSON	England	1811-70	Surgery	Discovered anæsthetic properties of chloroform.
C. J. DAVINE	England	1812-82	Bacteriology	Discovered bacillus of anthrax.
P. F. O. RAYER	England	1793-1867	Bacteriology	
LOUIS PASTEUR	France	1822-95	Bacteriology	
LORD LISTER	England	1827-1912	Surgery	Introduced antiseptic surgery.
RUDOLF VIRCHOW	Germany	1821-1902	Bacteriology	Founded modern cellular doctrine in pathology.
ROBERT KOCH	Germany	1843-1910	Bacteriology	Isolated tuberculosis bacillus and invented tuberculin serum for diagnosis of tuberculosis.
SIR ALMROTH WRIGHT	England	b. 1861	Medicine	Discovered "opsonin," bacillus-destroying substance in blood.
ELIE METCHNIKOFF	Russia	1845-1916	Bacteriology	Advanced theory of prolongation of life by diet of sour milk.
GREGOR MENDEL	Austria (Silesia)	1822-84	Biology	Established main laws of heredity.
AUGUST WEISMANN	Germany	1834-1914	Biology	Advanced theory of "germ plasm."
SIR FRANCIS GALTON	England	1822-1911	Statistics	Founded eugenics — scientific control of heredity.
JAMES CLERK MAXWELL ..	England	1831-79	Physics	Proved, mathematically, the existence of electro-magnetic waves.
KARL PEARSON	England	b. 1857	Statistics	Developed eugenics.
SIR WILLIAM CROOKES ..	England	1832-1919	Physics	First to detect radio-activity in metals.
WILHELM KONRAD RONTGEN ..	Germany	1845-1923	Physics	Discovered "X" rays.
NIELS FINSEN	Faroe Islands	1861-1904	Physics	Discovered chemical action of violet and ultra-violet rays.
MARIE CURIE	France	b. 1867	Physics	Isolated radium—most highly radio-active substance.
PIERRE CURIE	France	1859-1906	Physics	
FREDERICK SODDY	England	b. 1877	Physics	
SIR ERNEST RUTHERFORD ..	England	b. 1871	Physics	Investigated phenomenon of radio-activity and showed it to be due to disintegration of particles.
HEINRICH RUDOLF HERTZ ..	Germany	1857-94	Physics	Detected electro-magnetic waves.

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Science in Public Affairs. J. L. Hind.
Natural History of Selborne. Rev. Gilbert White.
The Human Side of Fabre. Percy I. Bicknell.
Pasteur and After Pasteur. S. Pasteur.
Through the Fields with Linnaeus. Mrs. F. Caddy.

Discoveries in the Ruins of Nineveh and Babylon. Sir Henry Layard.
Origin of Species. Charles Darwin.
Natural Inheritance. Francis Galton.
Darwinism and Lamarckism. F. W. Hutton.
Evolution and Animal Life. D. S. Jordan and V. L. Kellogg.

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Darwinism To-day V. L. Kellogg
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 The Electron Theory of Matter O. W. Richardson
 Chemistry in the Service of Man A. Lindley
 Chemistry in Daily Life L. Cohn

BIOGRAPHY

Michael Faraday Wilfrid I. Lindell
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 Alfred Russel Wallace J. M. Huxley
 Life of W. Thomson, Baron Kelvin Sylvanus Thompson
 Life of Newton Sir D. Lyell
 Life and Letters of Hugh Miller P. J. Payne
 The Life of Pasteur H. Vallery Radot
 Life of Sir Humphry Davy J. A. Parn
 Life of Sir Joseph Banks J. Smith
 Life and Works of Sir W. H. Huxley L. B. Holden
 Life of Edward Jenner J. Brown
 Life of Linnaeus B. D. Jackson
 Lord Lester Sir K. J. Collie
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 Account of Life and Times of (Francis) Bacon J. Spedding
 Vie de Copernic C. H. Huxley
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 Life and Letters of Charles Darwin Sir Francis Darwin
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 William Harvey D. A. C. Powell
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 John Dalton and the Rise of Modern Chemistry Sir H. L. Roscoe
 Life, Letters, and Journals of Sir Charles Lyell Edited by his
 son-in-law Mr. J. E. Hull
 Lamarck, the Founder of Evolution A. S. Pickard
 Memories of My Life Sir James Clerk
 Life of Joseph Priestley J. I. M. M.
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DRAMA: ITS ORIGIN AND TWOFOLD DEVELOPMENT

The Important Chapters of its Varied History in Many Lands

DRAMA originated in certain forms of religious or pagan celebration. The real meaning of the word "drama" is "action," and the invention of dramatic exhibition arose from an instinct in man to witness imitations of his own actions.

The satisfaction of this instinct early became a necessary accompaniment to man's moral and spiritual progress. Just as religious worship appeased his restless conscience, so drama helped his understanding. It was at once an inspiring force, beckoning to higher ideals of conduct, and a release from the pressure of everyday existence. Hence it quickly became an entertainment as well as a ceremony.

In this dual development of drama lies the secret of a certain up-grade and down-grade tendency in its history. In its highest forms drama has emulated religion as an elevating force; at its lowest it has, in part justifiably, incurred the persecution of the religious-minded. The sublime nobility of Greek drama at its zenith and the deep humanity of Shakespearean drama have to be balanced against the grotesque follies of the Roman drama during its decadence and the insipidity of much that passes for drama to day.

But drama still retains the marks of its religious origin. The invention has not weakened under the strain of use and abuse, and the theatre of to-day, with its elaborate machinery, is still an instrument which man may, if he chooses, employ for the exhibition of the best and noblest instincts of his kind.

Introduction of Dialogue

Considered as a device, drama has been many times "invented," and in all countries at different times. Its course of development varies in length and degree of achievement, but the story is in each case much the same. The line of demarcation between religion and drama is invariably to be found in the addition of a spoken dialogue to the public recitation of certain mythological chants, or choruses, in which music and dance also played a part. Drama cannot exist without dialogue, and for many centuries the festivals which formed the background of the first dramas were carried out without this transforming element.

These festivals were held in celebration of the great seasonal crises of spring and autumn; the re-awakening of nature after the long sterility of winter was greeted with vigorous song

and dance, while the reaping of the harvests was the signal for another outburst of joyful gratitude. War and peace were celebrated in appropriate language and rhythmic movement; the gods were invoked in pæans of praise or of thanksgiving. The importance of these mythological rites, so far as the drama is concerned, is that they were entirely artless and unrehearsed. Speech, song and dance were as spontaneous as a sudden exclamation at a joyful circumstance, as innocent of artistic intention as the gambolling of a lamb.

But there came a time when a union was effected between these exuberant expressions of feeling and the more conscious utterance of the poet, who, wandering from place to place, affiliated himself with the singers and dancers at their seasonal festivals, and addressed his verses to the leader of the chorus. The leader replied, and an "argument" ensued. It takes two to make an argument, and where there is argument there is drama.

CHINESE AND INDIAN DRAMA

Drama came into existence in China as early as the 18th century B.C. It was for many generations pantomimic in character. We read of a very early ballet called *Diversions of the Woods in Flower*, which synchronizes with springtime revels elsewhere and was probably the germ of Chinese drama. From A.D. 720-907 heroic drama of a more highly developed character flourished in China, and in A.D. 960 a new development, foreshadowing the much later birth of opera, was the presence of a principal personage who sang. The Chinese early became adept musical performers and introduced music into their plays on every possible occasion.

Domestic drama, in which a high moral tone was sustained, became very popular during the Kin and Yuen dynasties (1125-1367), but afterwards degenerated into farce. Certain peculiarities of Chinese drama, such as the great length of the plays—the performance sometimes lasting for several days—and the non-observance of the unities of time and place, survive to the present day.

Indian drama owes its existence to the sage Bharata, whose name signifies an actor. It is said to have existed in the 2nd century A.D., when a domestic comedy, *The Toy-Cart*, was performed, but it did not become regular until the fifth century, and began to decline about the eleventh century. The plays were

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performed in the open air or in the courtyards of houses

Indian drama may be said to have been aristocratic and exclusive in character. Much of the dialogue was written in Sanskrit, then already a dead language, known only to the cultivated, who could appreciate the highest flights of poetic and dramatic sentiment. In this way the drama in India was preserved from vulgarity and never became as it did in many other countries for long periods, merely the toy of the populace.

In Indian as in Chinese drama, no attempt was made to 'hold the mirror up to nature,' and the early plays were full of improbabilities. The characters in Indian drama sometimes took long journeys on the stage, and there was very little scenery employed. The Chinese however, wore magnificent costumes and were skilled in the use of properties. Realism, and the effort to create an 'illusion' on the stage, came very much later (1741). Neither the Chinese nor the Indians realized the difference between comedy and tragedy.

Decline of Early Drama

In those countries where drama was invented and practiced prior to the Grecian era, it developed to a certain point of excellence and then declined, generally speaking at a stage in the history of the country concerned when civilization and public morals had become decadent. In the countries, however, where primitive conditions prevailed longest—in India, for example—the drama has generally survived in its purest form, because it has never lost touch with the oldest and most venerated forms of religious worship. This is not to say that the highest drama flourished in pre-Greek times, but that drama retained its original impulse longer. With the coming of art, the element of artifice inevitably crept in, and a new process of evolution began which has given us *Hamlet* and *Charley's Aunt*.

THE GENIUS OF THE GREEKS

In Greece, drama first became a conscious art, and at the same time gained more by the application of man's intellect than it lost by the intervention of his inclination for amusement. To the genius of the Greek poets we owe all forms of dramatic art. They took upon themselves the responsibility of transforming a custom that was instinctive in the people into one that engaged their intellects as well. They controlled the riotous revels of Bacchus and added thought to the spectacle. Dionysus, Apollo and Demeter became symbols of man's destiny as well as objects of his random worship. Music and dance the glad choruses of

springtime revellers and the warlike chants of the Dorians, were natural, spontaneous expressions of chaotic, pent up emotion. The Greek drama, which was built upon these customs, directed this flow of bodily exuberance into the channel of the intellect.

How the Audience came into Being

In considering Greek drama it is possible to study more closely the gradual transition from religious ceremony to dramatic exhibition. It is the story of the growth of a conscious purpose developing out of a subconscious enthusiasm. Of the many changes that took place in the character of the country side revels, perhaps the strangest was the dawning sense of distinction between the audience and the performers. Originally, all took part in the seasonal festivities or joined in the phallic processions. Even after the celebrations enlarged in scope and took place in the presence of huge crowds, the chorus declaimed without any sense of being "on show," and the crowd were aware of witnessing a festival rather than a play. The revellers constituted a link between gods and men, and all who cared sought to join in that divine enthusiasm.

Moreover, the chants employed were common knowledge, handed down from generation to generation in the same way as the Homeric hymns. The instinct of the common citizen was to join in the proceedings, just as, centuries later, the instinct of the English villager was to join in the "Jack in the Green" procession or to follow Guy Fawkes to the bonfire.

Greek Festivals

To take part in a Dionysian revel or a Pyrrhic dance was, to the Greek citizen, to draw near to the gods. But these festivals were very disordered in character. Confusion often existed about the gods themselves, sometimes Apollo and sometimes Bacchus was worshipped as the Sun god. The people could not think out these things for themselves. They were swayed by irregular, uncontrollable impulses. Gradually, as the reasoning power of the Greeks developed, the revels became rites, more formal and restrained in manner, although still retaining much wildness and abandonment to emotional ecstasy. Fewer people took part in them, the audience, or rather the "congregation," looked on and wondered.

They listened also with rapt attention, to a newcomer on the scene a wandering minstrel who recited epic cycles of warlike happenings in remote times or distant places. This minstrel was called the "rhapsode," and, although he was primarily a poet, there is much evidence for describing him as the first actor. At first

his recitations were in the nature of interludes, but gradually he learned to harmonize his utterances with those of the chorus, and to address their leader. In order to be more conspicuous he stood upon a table or wagon, which thus constituted the first rudimentary stage.

Development of the Chorus

This union of the choral and the epic elements from which the Greek drama sprang first became noticeable about 554 B.C. But before this the ground had been prepared by certain changes in the forms of verse employed by the choruses. The first chants and poems were spoken in a form which had no definitely literary character. As the choruses became more intelligible certain forms were more closely adapted to the nature of the theme: thus the *iambus*, invented by Archilochus (about 708 B.C.), was peculiarly associated with the expression of satire and invective, while both this form and the *trochee* approached very nearly to the ideal of dramatic declamation. It is generally supposed that the invention of the *dithyramb* by Arion, about 625 B.C., was the direct forerunner of Greek lyrical tragedy.

For many centuries the genius of the Greek poets was at work transforming a chaotic medium into one capable of interpreting clear ideas and setting forth high ideals of conduct. The transition from religion to drama was still mainly technical; in spirit the Greek drama remained a religious festival until the days of its decline. After the introduction by Thespis of a masked actor (1580), during the 6th century B.C., the seeds of entertainment were sown, but the business of that masked actor was still far removed from mere "play-acting."

The Gods and Mankind

The whole object of the Greek theatre was to bring the gods down to man and lift man up to the gods. On its mechanical side everything was subordinated to the uses of a solemn, awe-inspiring occasion. Great care and ingenuity were employed in distinguishing the earthly from the heavenly proceedings; the gods descended by a stone stairway from the high screen at the back of the stage, or they were hoisted aloft by means of huge cranes hidden from view of the audience. The scenery, which was mainly architectural in character, usually represented a palace with cloud-topped towers, or sometimes a mountainous place, fit for the meeting between mortals and immortals.

The chorus entered the arena from underneath the auditorium and paraded in front of the stage, all the more important scenes taking place in the background. This change, which was brought about by Æschylus, the first regular

Greek dramatist (1513), marked a significant period in the development of the drama. Originally it was the chorus who dominated the proceedings; but the poet had succeeded in clearing the stage for the working out of his argument. The function of the chorus was still the same, but its part was reduced. It expressed for the audience, in a clear, controlled manner, the emotions stirred in them by the tragic spectacle being enacted before them.

Masked Actors

In structure the Greek theatres formed the rough model for all subsequent theatres, although there were many features which run counter to modern ideas of stage-craft. They were invariably unroofed, and generally situated near a wood or grove. The audience sat on tiers of stone seats forming a vast semi-circle capable of accommodating as many as 30,000—in one case 80,000—people. The stage was relatively very small, and was situated at a great distance from the auditorium, so that the actors, who wore large masks, were obliged to employ artificial means in order to make their voices heard in all parts of the building.

This arrangement, which we should consider an unnecessary disadvantage, was, to the Greeks, of supreme importance. Their aim was to avoid familiarity between spectator and actor and so preserve a sense of mystery and aloofness. Behind the stage there was a wide open space called the "proscenium." This part of the theatre is nowadays, of course, situated in front of the stage—another example of the reversal of our ideas since Grecian times. But all the separate elements of the modern theatre were invented by the Greeks. There was an orchestra space; and "wings" were employed, and changed according to the scene. Probably if we could visit a reconstructed Grecian theatre we should be astonished at its resemblance to our own and at the modernness of its arrangement.

Principles of Greek Stage-craft

But we should notice a difference in principle. The aim of Greek stage-craft was to hold the attention of the greatest number of spectators by an exhibition that came as near to reality as possible. The creation of an illusion, which later on became the chief aim of theatrical art, only concerned them in so far as it was necessary to overcome the exigencies of their immense arena. Hence the large coloured masks, the expressions on which conveyed to thousands of people the horror, grief, or other emotion associated with the character enacted.

Even painted scenery was only employed as a necessary subterfuge, and as little as possible.

It was not painted with the cunning intention of modern scenery, in order to deceive, but like the real thing depicted. Whenever possible the Greeks used, as "properties," the actual things concerned, such as vases or jewellery, but if the articles necessary to be shown were too small, they made larger substitutes for them, copying the beauty of them as nearly as possible.

There was never any "trickery" about Greek stage craft, and nothing at all of what we call "fustian." An unerring instinct for truth and beauty combined with common sense was the keynote of the production.

This aspect of the Greek theatre is important, because it reflects the deep seriousness of the Greek tragic drama. Although it became an entertainment for which people paid for admission, it was a very awe-inspiring one. From the moment when the chorus began their lamentation over the sorrows of the hero or heroine, the audience sat riveted, every nerve strained in tense anticipation of the spectacle unfolded before them, whether it was that of Prometheus, tortured for his rebellion against the gods, the sublime unhappiness of Oedipus, or the agonized sorrows of Antigone.

Themes of Greek Tragedy

The horror of Greek tragedy passes modern belief. Catastrophe is piled on catastrophe, and human as well as god-like nature is probed to its inmost depths. The passions are anatomized for all time. Murder and its revenge, crime and its Nemesis, the course of love and intrigue are the favourite themes. But although blood-hed and fearful disasters dominate the action, the mind of the poet soars above his own creations and carries his audience with him into an atmosphere of serene contemplation. The heart of the spectator quakes, but his intellect gradually comprehends the ultimate meaning of these ghastly sacrifices and racking tortures. He sees the noble purpose of the dramatist, which is to exhibit the best and worst characteristics of human nature, to compare it with the exalted wisdom and conduct of the gods, and to shadow forth the perfection of mankind through suffering.

The history of Greek tragic drama is usually divided into three periods—from its earliest beginnings to the appearance of Æschylus (535-499 B.C.), the Classical Period (499-405 B.C.), in which the three great masters of Greek tragedy, Æschylus (1513), Sophocles (1576) and Euripides (1537), flourished, and the Period of Decay which is of uncertain duration and includes the inferior tragedies of Euphorion, the son of Æschylus, and of the sons of Sophocles and Euripides.

The Tragedies of Æschylus

Æschylus (525-456 B.C.) was the parent of Greek tragedy. He worked as a boy in a vineyard, and is said to have been inspired to write plays through worship of the vintage god. But it was military glory that he celebrated in his first tragic trilogy, *The Persians*, with which he defeated Choerilus, Phrynichus and Pratinas in contention for the tragic prize. He fought with great valour at Marathon and Salamis during the Greek war with Persia.

He wrote about seventy plays, of which only seven survive. Many of these were dramatic developments of the Homeric hymns, or, as Æschylus described them himself, "scraps from the banquet of Homer." His highest achievements were the Oresteian trilogy, including the *Agamemnon*, the *Choephore* and the *Eumenides* or *Furies*, and the *Prometheus* trilogy.

In addition to the introduction of a second actor Æschylus invented the thick-soled shoe which enabled the individual performer to tower above the personages in the chorus, and he also improved the shape and artistic effectiveness of the mask.

Sophocles, Master of Greek Tragedy

Plato (501-504) defined tragedy as "an imitation of the noblest life," and in the plays of Æschylus we see the form created which was to make possible the fulfilment of this ideal in the tragedies of Sophocles (495-405 B.C.) (1576). To this great master, who defeated Æschylus for the tragic prize at the Theatre of Bacchus, Greece owes the crowning glories of her drama.

Just as Shakespeare bestrided the wide world of the Elizabethan drama, making his fellow-giants seem like pygmies, so Sophocles, with his breadth and sureness of vision, his superb sanity and wisdom, ranks higher than the many who contributed to the glory of Greek drama at its zenith.

In the *Oedipus*, *Antigone* and *Electra* mortals grow in stature until they seem to touch shoulders with the immortals, and, although we can only imagine the woe and wonder that swept through those tragedies as they were performed on the Greek stage, we can, in reading them, recapture something of a conception of human existence which was god-like in its serenity, and at the same time deeply human in its sympathy with the lot of suffering, erring mankind.

Sophoclean tragedy is the rare flower of Greek drama, and after it had fully blossomed no other growth arose to equal it. In the plays of Euripides (480-406 B.C., 1537), an element of sophistry and vulgarity disturbs the serene

atmosphere of the Greek theatre. Euripides, however, was a great master of the tragic form; his *Medea*, *Orestes* and *Electra* are perfect examples, in the construction, cumulative effect and climax, of the classical period. But in spirit Euripides falls far below Sophocles. He toys with the lesser things which the early masters had taken pains to exclude from the theatre. His heroes do not suffer in the sublime sense of those of Sophocles: their trials are less ennobling if more human; they are often reduced to beggary and appear on the stage in rags and tatters.

Euripides also took great licence with the sacred proprieties of the Greek stage; he degraded the status of the chorus and broke the union between it and the actors. For these faults he was soundly trounced by Aristophanes (1516), the greatest of the Greek comic poets, who never ceased in his own plays to refer to Euripides in terms of scathing contempt.

THE BIRTH OF COMEDY

The descent from the god-like to the purely man-like had begun, and comedy sprang into being. It owes its excellence practically to the genius of one man. Aristophanes (448-380 B.C.) was the supreme satirist of the Greek theatre. But it must not be supposed that he was less of a poet than his predecessors, or that his purpose was less serious. In his plays beauty mingles with mirth, and profound human insight is expressed in shafts of brilliant wit and bitter invective.

Comedy is not necessarily a lesser thing than tragedy; it is merely different. If tragedy brought the gods down to men, comedy no less aided men to aspire to the condition of the gods. But the comic spirit is a frailer instrument than the tragic spirit: its fine essence is easily destroyed by an excess of the very means it employs. Humour quickly degenerates into buffoonery or, becoming divorced from a serious purpose, amuses without edifying.

Wit and Parody

Like tragedy, comedy owes its origin to religious festivals, more particularly to the worship of Bacchus. At these festivals there was inevitably an element of sportiveness which developed gradually into conscious wit and parody. The growth of Athenian public life, with its new institutions and ideas which set men thinking, and sometimes laughing, had already begun to be reflected in Greek tragedy, especially in the plays of Euripides, who, by the freedom of his allusions to topical events, paved the way for a union between the countryside farcical entertainments and the intellectual diversion provided by the Athenian theatre.

Old Comedy came into existence after the establishment of democracy by Pericles (1565). Cratinus (450-422 B.C.) and Crates (449-425 B.C.) were the popular satirists of this period, which, however, did not reach its full fruition until the appearance of Aristophanes, who, in his comedies of *The Clouds* and *The Birds*, preserved the allegorical element in the Greek drama, while he poked merciless fun at gods, philosophers, statesmen and ordinary men.

The Comedies of Aristophanes

The Greek sense of humour was what we should now regard as rudimentary; it was a joke to end a sentence with an unexpected word, whether relevant or not, and compound words such as "signet-ringed" or "long-haired" were considered funny. But these tropes, in which the plays of Aristophanes abound, are secondary to the main conception of the comedies, which, by their bold design, excite to intellectual mirth.

Thus, in *The Clouds*, the Sophist philosophers are openly ridiculed; in *The Wasps* lawyers and those who put their faith in lawsuits are parodied; in *The Birds* human nature is satirized, after the fashion of Aesop's fables (1370), in the guise of a race of feathered beings who dwell in the marvellous state of "Cloud-cuckootown" and nurse ridiculous aspirations.

An important feature of Old Comedy was the licence which the playwrights claimed to lampoon public personages. In those early days of satire there was no attempt to disguise its object; a spade was a spade, and Socrates was Socrates. The actor impersonating some well-known public individual was made to appear ludicrous by being hoisted aloft in a basket. Even the ancient heroes, so long revered by the Greek populace, were mocked, Hercules being made to appear as a vulgar voluptuary.

The Greek Comic Spirit

The wit of Aristophanes stopped short of nothing; he scourged, but he also purged. Innately conservative, he scoffed at all innovations, but he was never blinded by mere tradition. A peace-lover, he never tired of poking fun at the military aspirations of Greece; a man of sound commonsense and thoroughly acquainted with the civic and political life of his time, he was continually exposing the flaws in experimental systems of philosophy and government.

Old Comedy was the most vigorous product of the Greek comic spirit. It became, however, too robust and outspoken for public safety, and legislation had to be introduced in order to curb the ribaldry of the chorus and the comments upon persons and matters of contemporary

importance. With this change the period of Middle Comedy begins (about 400–338 B.C.), characterized by the restrained comedy of manners of Eubulus, Antiphanes and Alexis. In these plays many of the types created by Aristophanes were employed, but the dialogue was toned down and lacked fire and sting.

The End of Greek Drama

The final period of Greek comedy, known as *Neu Comedy*, marks a very high development in art. Its chief figures were Philemon (fl. 330 B.C.) (1586), Menander (342–291 B.C.), and Diphilus (c. 300 B.C.), whose graceful, witty comedies with their ingenious plots and subtle by-play constituted a refined form of entertainment, if they did not set the Greek audiences in paroxysms of mirth or give them furiously to think, as had done the comedies of Aristophanes.

Such is the story, briefly outlined, of the rise and fall of Greek drama. The causes of its slow decline are to be found in the gradual disappearance of the old mythology, the break-up of the Athenian state, and the divided aims and opinions of the Greek people themselves. Drama reflects life and the clear ideas common to the greatest number of people. When there is doubt and disagreement when institutions decay and the social and political body begins to crumble, the mirror becomes clouded. But the Greeks had firmly established the first regular drama, and all other drama until the Middle Ages is but an epilogue to the story of their marvellous achievements.

THE ROMAN DRAMA

We find in Roman drama, which is the most resounding echo of Greek drama, an interesting link in the story of the general growth of dramatic art. So far the regular drama had still retained much of its cousinship to religion; it was a performance, but the performers had a keen sense of the dignity of their calling and their status was high in Greek civilization. It is a long step from the Greek actor with his coloured mask and buskined shoes to the Roman mime, who achieved a wider range of histrionic accomplishment but was less careful of the material he employed. The Italians have always been born actors, and we find the Roman drama beginning with crude farces acted by mountebanks as an accompaniment to religious festivals, and developing on imitative lines and with a strong leaning towards theatricality and display.

The history of the acting profession begins in Rome, and perhaps the source of the ill-repute from which it suffered for many centuries is to be found in the fact that whereas in Greece the drama was introduced by men of the highest

birth and breeding, in Rome it was imported from Greece, as a novelty, by foreigners of obscure origin, men of no status, adventurers, travellers, and the professional mountebanks themselves.

Copying the Greeks

Roman drama at its best was a second hand or plagiarized version of the latter period of Greek drama. It had none of the pristine glory that was Greece. It began about 240 B.C., after the Punic War, when the Romans, flushed with victory, were ready to indulge themselves in any new form of entertainment. The first Roman playwright, Livius Andronicus (b. 278 B.C.), was a Greek emigrant. He copied the tragedies and comedies of the Greeks, but his plays have little importance in the story of drama.

Almost the only other Roman playwrights of outstanding ability were Seneca (c. 4 B.C. – A.D. 65) whose tragedies, based on those of Sophocles and Euripides, furnished a model for the best period of Roman tragedy, and Terence (185–159 B.C.) (1580) who reproduced the best comedies of Greek New Comedy.

Roman drama had no real life of its own. It was not a travesty of the Greek drama but its theme adapted to suit the militarist and luxury-loving Romans were on a lower plane. The Olympian and the household gods were freely intermixed, and flattery of the great Roman families alternated with abuse of demagogues which the latter were usually powerful enough to suppress.

Spectacular Plays

Important changes in Roman stage craft bring us nearer to the modern stage. Love of spectacle was the keynote of Roman theatrical audiences. The stage was brought closer to the auditorium and the actors, dispensing with masks and mechanical voice amplifiers, became more prominent. They painted their faces and wore highly coloured wigs. Criticism of their efforts came into being and a great step forward in the arts of gesticulation, facial expression and elocution was made. Most of the actors were slaves trained in their art by the dramatists, and some of them, notably Q. Roscius Gallus (d. 62 B.C.) and Æsopus attained to great distinction.

The function of the chorus dwindled almost to nothing, and large crowds of supernumeraries swarmed on to the stage. As an example of stage "realism" as opposed to the "reality" which the Greeks aimed at, it is recorded that in the Roman version of *Agamemnon* the return of Clytemnestra was enacted to the accompaniment of a long procession, including 600 mules heavily laden with baggage.

In the end the Roman theatre degenerated into little more than a spectacle and shared honours with the circus and the gladiatorial contest. All trace of the best Greek influence disappeared, and the great period of classical drama was over.

THE CHURCH AND THE DRAMA

Nearly ten centuries passed before regular drama reappeared. The rapid spread of Christianity brought about the closing of the theatres and condemned the actors to an irregular existence as 'strolling players'. We follow these outcasts all over Europe earning precarious livelihoods as minstrels, buffoons, jugglers and even tumblers. They formed the main link between the old regular drama and the new. They carried with them the remnants of a tradition which could not wholly die and which was to be given a new impetus once more with religion as the inspiring force.

It is not difficult to understand why the early Christian Church condemned the theatre as it lingered on during the declining years of the Roman Empire. Not only was it an attraction which kept people away from the religious services and festivals, but its degenerate and false presentation of life degraded public morals. At the same time the appeal of theatrical art in its nobler aspect was never wholly lost upon the Christian teachers. Chrysostom (1528) entirely condemned, but Augustine (1517) who had witnessed classical drama in his youth, remained partly sympathetic. This appreciation of the ennobling possibilities of the drama on the part of those responsible for the spiritual welfare of the people is significant. We shall see presently how the monks and clergy, during the latter part of the Middle Ages not only wrote plays themselves but gladly invited the co-operation of the strolling players in the performance of them.

Strolling Players

For many centuries, however, Christianity had nothing to fear from the rivalry of the stage. The strolling players could do no more than help to pass away a dull half hour at a street corner. They had no dramatic material. The old mythology was dead and the new faith was founded on the supreme drama that had actually happened at Calvary. That mystery engrossed men's minds and revolutionized their conception of the meaning of existence.

But although Christianity was rapidly becoming the common religion it was not yet universal enough, nor settled enough in form, to produce a drama. The mirror reflected strange and complex emotions, for almost as soon as men became aware of spiritual

existence they were beset by the new experience of spiritual unrest.

While the Christian drama was slowly being born, the old drama and the means of expressing it were being forgotten. During the Dark Ages the common people were entirely ignorant of pre-Christian culture. Both art and science sunk to a low ebb. It was thought that this transitory world would soon come to an end, and the motive for the development of man's material resources and for the embellishment of his material surroundings had vanished.

Greek and Latin manuscripts were preserved by the monks as curiosities. The knowledge contained in them was regarded as erroneous, and the wonders they described as something that would never return. Nor was it possible for the average early Christian to understand Greek culture. Man had become an entirely different creature, a mystic absorbed in the contemplation of eternity and his own salvation and the clear ideas of the Greeks would have seemed to him anything but clear.

Revival of Dramatic Instinct

But as time went on, and the world did not come to an end, the outward life of the people began to revive. The old instinct for play reasserted itself. The village festival had never entirely died out, and the joys and sorrows of ordinary human experience had always been the subject of folk songs. There were also the religious festivals, the feasts at Easter, Shrove Tuesday, and Christmas.

Compared with the pagan revels these celebrations were relatively tame affairs. The Dionysian revel was an orgy of unparalleled licence, the Christian celebration of the seasons, such as the English 'Jack in the Green' although arising from spontaneous joy in the fertility of nature, was sobered by knowledge of the Faith. These simple observances, based on animal spirits and tempered by spiritual consciousness gradually developed into a dramatic form, the folk song became folk drama and the Shrove Tuesday celebration developed into the liturgical mystery.

An Early English Play

In England the drama was at first purely religious in character. The first signs of it are to be found in the elaboration of the masses sung in church. Dialogues were introduced between the two angels at Christ's sepulchre, or between the two Marys and Salome. This began about the twelfth century. In 1110 a *Play of St Katherine*, acted by the scholars of Norman Geoffrey, headmaster of a monastery-school, was performed at Dunstable. Much earlier than this, probably, crude miracle

plays were performed in Cornwall, in the Cymric dialect.

The liturgical plays embraced all the most dramatic episodes in the life of the Saviour. Favourite subjects were the announcement of the coming of the Messiah to Herod by the Magi, the flight of the Holy Family, and the raising of Lazarus; but some Old Testament themes were also dramatized, such as the story of Shadrach, Meshach and Abed-nego. Actual representations of the Passion did not begin until much later, but, as a vindication of Christianity, an allegorical play called *Anti-christus* was frequently performed.

Very gradually the liturgical plays became secular, in so far as they were also performed by professional actors out of doors, on wheeled platforms supporting a sort of scaffolding divided into an upper and a lower portion. But the themes were still religious. The fall of Adam and Eve, the drama of Cain and Abel, and the Nativity were frequently exhibited.

The Mystery Plays

The actors, or mummers as they were called, travelled from place to place and performed their cycle of mysteries over and over again, moving from one street to another. The setting of the plays and the dressing of the characters were simple, symbolical and effective. Devils appeared in black; angels wore long white robes and flaxen wigs. The Deity occupied the top portion of the scaffolding and was usually shown with a cloud scene behind Him. Herod and the heathen Saracen were suitably attired, and in every case great care was taken to differentiate between the good and evil characters. Always, at the end of the plays, which were really charades based upon the teaching of the Bible, righteousness triumphed, and Lucifer was sent back to hell.

Miracle and Morality Plays

Roughly speaking, the English religious drama falls into three sections—the Mysteries, which dealt only with scriptural events; the Miracle Plays, in which the legends of the Christian saints were represented; and the Moralities, or allegorical pictures of life illustrating the great moral truths. In these last, the abstract virtues and vices, such as Mercy, Justice, Truth and Peace, Covetousness, Hypocrisy and Pride, were impersonated. The mysteries reached their highest degree of development in the annual performances at York, Townley and Chester; while, of all moralities, *Everyman* (1529) is supreme in its dramatic epitomization of the life of man in Christian times.

The short step from the morality play to the chronological play was taken in 1548 by

Bishop Bale, whose *Kyng Johan* was the first attempt to depict historical scenes on a stage. The first English tragedy, *Gorboduc*, was written by Thomas Sackville and Thomas Norton, and acted by students at the Inner Temple in 1562. Its theme of an unwise king who divided his kingdom among his children foreshadows *King Lear*, whose author was born two years later.

Many other chronicle plays were written at this time and acted by boys at Eton or Westminster. They prepared the way for the great outburst of national enthusiasm and patriotic fervour which was a leading motive of the early Elizabethan dramatists.

First English Comedies

Meanwhile English comedy had begun with *Ralph Roister Doister*, which was the work of an Eton headmaster, Nicholas Udall (1506–56) (1582), and *Gammer Gurton's Needle*, variously ascribed to Dr. John Bridges and Bishop Still. The action of these and other early comedies was domestic or rural in character, and the significance of them is that they were fresh and spontaneous in conception and typically English. There was as yet no trace of derivation from ancient models. The most trivial incident served as a peg upon which to hang a story bristling with rough humour and incident. Thus, in *Gammer Gurton's Needle* the loss and rediscovery of a needle forms a plot which brings into play a surprising range of native wit and reveals the deep potentialities for good and ill in the simplest human characters.

THE RENAISSANCE AND THE DRAMA

The influence which was at once to refine English drama and to make it still more vigorous and spontaneous was the rapid development of the great world-wide movement known as the Renaissance. The deep spiritual unrest of the Middle Ages had at last given way to a widespread desire for the opening up of the world and the rediscovery of the glories and beauties of the past. Art and science were re-born. With the invention of printing and the making of books (594) the long night of the Dark Ages had definitely passed, and the dawn shone with the promise of vast achievement. Once again men sought knowledge for its own sake and rejoiced in the exercise of their intellectual faculties. But this rejuvenation of mankind was tempered and coloured, as we shall see, by Christian thought and feeling.

In Italy the classic masterpieces of the drama were restored and emulated. The movement rapidly spread to France, where tragedies based on the Senecan model started the new regular drama. French drama developed on

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more definitely classical lines than elsewhere, and the element of mediæval mystery quickly disappeared. In England we find Lyly (1553-1606) and Peele (1558-98) (1565) copying the Italian pastoral style of comedy. But the English drama had been a thing of vigorous growth even before it entered into the full stream of the Renaissance movement. Under the patronage of Elizabeth and her brilliant court it was destined to become the wonder of all ages. It absorbed the classical influence, but it retained certain robust qualities of its own, a ruggedness of style, a freedom and wealth of poetic diction and a deep humanism.

Shakespeare's Predecessors

During the opening years of Queen Elizabeth's reign (1516-18) England teemed with dramatists of genius. A long list could be made of Shakespeare's predecessors alone, but the most memorable names are those of Robert Green (*b.* 1558), Christopher Marlowe (1564-93), Thomas Kyd (1558-94), Thomas Nash (1567), Henry Chettle (1564-1607), Anthony Munday (1533-1633), and Thomas Heywood (1575-1650). Their plays, written either independently or in collaboration, were mainly of an historical character with a strong national tendency, and they generally contained a subplot of a burlesque or fanciful description.

But the field was at once wide and deep. The wonderful stories of the old world were coming to light again. The English citizen knew nothing of the tragedy of Dido or the legend of Endymion until the early Elizabethan dramatist put them into dramatic form. In these plays we find the scene laid in Athens or Rome and the characters called by Greek or Roman names. The stories of Boccaccio were plentifully drawn upon, as were also the still lingering legends of the Middle Ages, the stories of the struggle against Lucifer and his final overthrow. In the skilful admixture of these elements and the fusing of them into something independent and unique lie the strength and glory of Elizabethan drama.

Marlowe's Power

Of the above-mentioned names, that of Christopher Marlowe (831) stands out prominently in the wonderful story of Elizabethan drama. He was the spiritual parent of Shakespeare, whom he might have rivalled but for his early and tragic death at the hands of an unknown assassin at a Deptford tavern. His *Tamburlaine the Great* (1587) far excelled the plays of his contemporaries in the mighty power of presenting stupendous events and the command of majestic blank verse which it revealed to the eager Elizabethan audiences. His *Doctor Faustus*

(1588) expressed the very core of the mediæval faith as well as its preoccupation with alchemy and magic. In *Edward II* (1594) he raised the chronicle play to the heights of tragedy.

Although we know so little about the lives of the Elizabethan dramatists, and least of all about the personal story of Shakespeare (829), the greatest of them all, they live for us in their achievements and in the spirit of their enterprise. We see young men of all classes, some of them university-trained, but others schooled only in the rudiments of Latin and Greek, converging upon London, then the centre of a culture such as England had never known before, and gathering together in the taverns on both sides of the Thames, where theatres rapidly sprang into existence.

Elizabethan Theatres

The earliest Elizabethan theatre was the Theatre, built in 1576. It was succeeded by the Curtain, the Rose, the Cross and Keys, and the Globe, the last named being especially associated with the middle and later triumphs of Shakespeare and other dramatists. These theatres were circular buildings partly roofed in and constructed of brick and timber. They were rather developments of the scaffolding employed by the early English mummers than imitations of the Greek theatres. The stage jutted out into an area covered with straw, where the "groundlings" or common people stood. The courtiers and well-to-do people sat in boxes arranged in tiers. At the back of the stage there was a curtain, and sometimes a balcony, which was employed as such during the performance. No scenery was used, but there were many realistic properties. The performances took place in the afternoon, so that no lighting effects were necessary.

TYPES OF ELIZABETHAN DRAMA

Elizabethan drama was of a most varied character. There were the tragedies and comedies of everyday life, such as *Arden of Feversham*, whose authorship is unknown, and Dekker's (1570-1641) *How a Man may Choose a Good Wife from a Bad*; the romantic tragedies based on Roman or English history, and the romantic comedies, usually derived from an old Italian tale of love or intrigue.

Shakespeare excelled in both these latter classifications. In his earlier historical plays, particularly in *Titus Andronicus* (1594), he modelled his style on Thomas Kyd (1558-94), whose *Spanish Tragedy* (1584-89) had set the fashion in unrestrained blood-lust and violence of action. But in *Romeo and Juliet* (1597) Shakespeare first emerges as a master of the new form of tragedy, and his long experience as a

tinkerer of other men's plays enabled him to transform the ordinary chronological play into tragedy of such high order as *Julius Caesar* (1599), *Macbeth* (1603), *Hamlet* (1604), and *King Lear* (1606).

Other tragedies of the best period of Elizabethan drama, when the classical influence had modified and restrained the exuberance of native genius, are Webster's (1580-1625) (1587) *The Duchess of Malfi* (1616), Chapman's (1559-1634) *Revenge* (1613), and Ben Jonson's *Catiline* (1419). Later, we find a still further refinement in *The Philaster* and *The Maid's Tragedy* of Beaumont and Fletcher (996).

It is obviously impossible to enter into the details of a period in English dramatic literature which was overwhelming in its prodigality of genius. The fertility of the Elizabethan poets overflowed into other picturesque forms: the masque and the pageant, the narrative poem and the sonnet. Even after the great romantic movement had swelled to its climax and subsided, there remained a residue of brilliant talent, which lingered on until the reign of Charles I (1527), when Puritan attacks on the stage and the ordinance of 1642 finally brought it to an end.

FRANCE: BIRTHPLACE OF MODERN COMEDY

English drama does not become interesting again until the period associated with the restoration of Charles II (1527). The next great step in the creation of drama as we know it to-day was taken in France, the birthplace of modern comedy. As in England, French regular drama began with religious moralities and developed with the Renaissance. While the moralities sank to mockeries of religion, the classical influence affected tragedy more closely.

France, it must be remembered, is situated nearer to Italy than other countries where the drama flourished. For generations strolling players, still bringing with them something of the ancient histrionic tradition, had wandered over the Alps and set up as street performers in the Parisian thoroughfares. Copies of Seneca and Terence (1735) more easily found their way into France than into England. The Renaissance in France, therefore, took the form of a more direct classical revival. Beginning with translations of Sophocles and Euripides, Seneca and Terence, it reached its zenith in the seventeenth-century classical tragedies of Corneille (1503) and Racine (1503). But the credit for the inauguration of a regular drama must be given to the poet Du Bellay, who, with his associates, Ronsard (1570), Jodelle and others forming themselves into a clique known as the "Pléiade" early in the sixteenth century, sounded the true note of the Renaissance.

French Classical Tragedy

The classical drama in France was quite different from the romantic drama in England. It was more formal, more circumscribed by rules. The Elizabethan dramatists made no laws for themselves; they forged their creations in the white-heat of intense thought and feeling, and one mould would not serve twice. French classical tragedy was more law-bound, and in consequence it easily became stereotyped. Moreover, certain restrictions, which the Greeks had considered expedient but not essential, became, in French tragedy, definite observances. The unities of time and place were strictly preserved. The hero must never behave otherwise than heroically, and the villain must exhibit no saving grace. Even Voltaire (1003) could not free French tragedy from these and other cramping restrictions which hindered the growth of a purely national French drama. At the same time French tragedy reached a very high level of poetic and dramatic excellence. Corneille (1503) and Racine (1503) at the height of their powers were unsurpassed in wide range of dramatic expression and depth of feeling. It remained for Jean Baptiste Molière (1167) to invent a form of comedy which was as free from pedantic technicalities as French tragedy was choked by them.

VOGUE OF ITALIAN COMEDY

Before Molière there was no regular French comedy. Farces, performed by Italian mountebanks, provided the lighter forms of entertainment. These plays were nearly all variations of the Italian comedy of masks, and the same traditional figures, Pierrot and Polichinelle, Harlequin and Pierrette, reappeared in them with a monotony which was only overcome by the resource and ingenuity of the actors. These figures, and the stories woven round them by Italian fantasy, died hard. Molière, who spent nearly half his life as a strolling player of no great consequences, early became acquainted with them and introduced them into his plays. But the Italian comedy of masks was, after all, an artificial product. Molière knew this and set himself to create a comedy dealing with actual life.

This innovation forms a vital link in the story of the drama, and more particularly that of the theatre. Hitherto comedy had played second fiddle to tragedy. Even in Greek comedy at its best the tendency to lapse into mere buffoonery was frequent, and some of the Greek comedies are really satires on the tragic form. Comedy, at any rate, was farther removed from the original, serious purpose of the drama. Elizabethan comedy arose rather from an

exuberance of spirits than from an intellectual grasp of the comic spirit. There was something haphazard and aimless about it, although Ben Jonson's *Every Man in his Humour* (1597) approaches near to the Moliéresque conception of comedy.

The New Function of Comedy

What Molière did was to make comedy as serious a thing as tragedy. He raised laughter to the level of the sublime. Beginning with commonplace farces, he threw off the conventional laughing-stocks of the stage and, interpreting human character as he found it, showed the wide discrepancies between purpose and achievement which make man at once so noble and so mean a creature. Hatred of hypocrisy in *Tartuffe* (1664), and contempt for pretentiousness in *Le Bourgeois Gentilhomme* (1670), are motives as passionately earnest as the Greeks' desire to emulate the gods. In *Le Malade Imaginaire* (1673) we see how even the sovereign gift of imagination may make man ridiculous and debased.

Molière had no imitators, but he was the originator of modern comedy. He stands between the old drama and the new, between the attempt to galvanize the classical forms into new life and the effort to create drama out of the stuff of actual human experience. The Renaissance, and that other great movement the Reformation of religious thought, had done their work in preparing men's minds for the perception of reality both in the affairs of daily life and in art. Henceforth drama was to mirror more and more intimately the intricate human relationships of the inner life of the individual.

It lost something in the process. In becoming more lifelike it sacrificed some of its fidelity to the eternal verities. By widening its range so as to include scenes of the most ordinary and commonplace character it lost, for the time being at any rate, its special appeal to the highest senses and its kinship with religion. But we must remember that we are now talking of something comparatively recent, something which is still growing and may yet achieve unprecedented heights.

SPANISH DRAMATISTS

The period of the Renaissance cannot be rounded off without brief reference to the drama in Spain and Germany, the two other countries nearest to Italian influence. Spanish drama closely resembles English drama in its rapid development on strong national lines. Religious in origin, and coloured by the long struggles between Cross and Crescent which took place on Spanish soil, it expressed the romance and chivalry of the crusading tempera-

ment. Lope de Rueda, a mechanic of Seville, was the first to build a stage and perform plays independently of the religious bodies.

Spain is peculiarly the home of romantic drama, and her greatest dramatist, the versatile Lope de Vega (1583), has been described as the Spanish Shakespeare. Cervantes (1526) also wrote plays, although none of them contains much of the spirit and purpose of his great prose romance, "Don Quixote." Pedro Calderon de la Barca (1525) followed Lope de Vega and kept the Spanish drama alive until the break up of the national spirit towards the end of the seventeenth century.

GERMAN FOLK-LORE PLAYS

In Germany drama was influenced more by the Reformation than by the Renaissance. The popular drama owed its existence to Hans Sachs (1571), the shoemaker of Nuremberg immortalized in Wagner's opera, *Die Meistersingers*. Folk-lore plays and moralities existed for many generations, and had a strong hold over the German people. The awakening to regular drama was rather one of thought than feeling. G. E. Lessing (1729-81) (1552) founded a national German theatre and, both by his critical insight and creative genius, stimulated the development of a serious drama. His *Miss Sara Sampson* (1755) was one of the earliest and most successful of plays dealing with everyday life.

Klopstock (1724-1803), Pfeffel (1736-1809), and Wieland (1773-1813) (the last introducing translations of Shakespeare) caught something of the Renaissance spirit, and led up to the period in German literature known as the "storm and stress" period, when a great effort was made to prevent German drama from becoming merely a popular amusement.

Goethe and Schiller

The result of this was a classical revival headed by Goethe and Schiller (1793-6); but the German effort to emulate the romantic drama of Shakespeare failed, and there was not sufficient unity among the various schools of dramatic authorship to produce a genuine and lasting national drama. Goethe's great dramatic poem *Faust* stands by itself and cannot be included in any group of German drama.

The story of drama has now become more closely linked with that of the development of theatrical art. In the beginning, as we have seen, dramatic representation was almost artless. The Greeks introduced a conscious purpose, but their art was not self-conscious in the sense that dramatic art is to-day. It was a union of intellect and instinct trained to a single, noble aim. The oratory of the preacher

or the statesman is an art; but it is as a means to an end that it is important. In this sense the Greek actors were artists; but the means that they invented have since been used for their own sake as well as for the expression of the highest and most serious drama.

The Stage Illusion

If we look back at the Greek theatre with its high aim of cultivated simplicity, and then at the Elizabethan theatre with its crude stage furnishings and first beginnings of trickery, and finally at the English stage during the post-Restoration period, we shall be startled to find what changes have taken place. The creation of an "illusion" is now the chief aim. Every device is employed which induces forgetfulness of the real world and absorption in an imitation one. The theatres are now completely closed in, and artificial lighting becomes essential to the creation of a new world of make-believe. The actor, profiting by age-long experience as orator, gymnast, tumbler and buffoon, has become expert in suggesting the whole range of human emotion. The Greek mask finds its complete antithesis in the consummate art of facial expression employed by a Garrick (329, 180) or an Irving (75), a Mrs. Siddons (159) or a Duse (1534).

To a certain extent histrionic art is independent of drama, and dramatic literature of the highest order is certainly not dependent upon the art of the actor. Children can be trained to perform Greek plays and to preserve the spirit of them, and it is significant that Max Reinhardt, the great German theatrical producer, finally turned to the arena and the church for the exhibition of the highest form of drama, after experimenting in the most scientific forms of theatrical illusion.

THE RESTORATION DRAMATISTS

The theatre is the province of the actor; it is he, and not the dramatist, who developed its resources. Nevertheless, the actor can, if he chooses, devote all his skill to the presentation of the highest forms of drama, and when he does so the cause of the drama as a means of spiritual exaltation gains by the union.

In France the theatre of Molière had given a great stimulus to acting achievements, culminating in the triumphs of Rachel (1568), Sarah Bernhardt (243), and Coquelin (1530). English acting did not reach a very high level until the Restoration, when a galaxy of brilliant dramatists sprung into prominence and provided new material. Dryden (1631-1700) (1533), Davenant (1608-68), and Otway (1652-85) led the newly awakened demand for dramatic entertainment. The ban on women

appearing on the stage had been removed, and actresses enhanced the novelty of theatrical performance.

Of these early Restoration plays, Dryden's *All for Love* (1678) stands out as a literary masterpiece close to Shakespearean drama in its lofty conception and poetic force. *Venice Preserved*, by Otway (1652-85) (1563), was one of the first English tragedies of a type so intimate that the audience is harrowed by sympathy with the anguish of the hero and heroine. In such plays as these and Southerne's *The Fatal Marriage* (1694) the actor scored heavily. Mrs. Siddons (159), by her acting in the latter, produced fainting fits in the audience, and even men wept.

An English Masterpiece

English Restoration comedy borrowed much from Molière in externals, but almost nothing in spirit. Ingenuity of plot and intrigue were combined with dialogue of the coarsest character. Wycherley's (1640-1716) (1591) *The Country Wife* (1672), witty as it is, mirrored the incredible licence of speech and action characteristic of the age. Congreve (1670-1729) (1529), although far superior in intellect and delicacy of feeling to his contemporaries, at first followed them in pandering to the public taste for salacious comedy.

But it is to Congreve that the Restoration period owes its masterpiece of pure comedy, *The Way of the World* (1700). Without this consummate picture of the manners of an age in which intellects were refined although morals were loose, the story of English comedy at this period would, indeed, be a sorry one. Its character in general fully justified the virulent attack upon the stage made by Jeremy Collier (1650-1726), the Puritan publicist, in his famous pamphlet, "A Short View of the Immorality and Profaneness of the English Stage," published in 1698.

The Period of Reaction

The stage learned its lesson. After the less fulsome comedies of Vanbrugh (1664-1726) (1583) and Farquhar (1678-1707), there followed the full reaction which made the inspired sentimentalities of Sir Richard Steele (1672-1729) (1577) popular. With the sting taken out of it, Restoration comedy quickly declined, and its literary quality vanished. Its saving grace had been that it fulfilled part of the original function of drama by depicting the vices of the age while it did so without emphasizing the other side of the picture. It was a comedy of manners only, and bore but the most superficial resemblance to the type of comedy created by Molière, in which the very soul of society and

that of man were held up to that sublime ridicule which points the way to better and more enlightened modes of living.

Goldsmith and Sheridan

Last echoes of the old English literary drama are found in Goldsmith's (1728-74) (1541) *The Sloop to Conquer*, which for freshness and clean, robust humour stands by itself, and Sheridan's (1751-1816) (1251) *School for Scandal*, also unique as a comedy of manners in which exquisite sentiment is allied with a sane moral outlook upon life. But the theatre in England during the eighteenth century came entirely under the domination of the actor. There began that schism between dramatist and performer which has not yet been healed. Respect for the literary masterpieces of the past gave way to a sense of stage expediency. The text of Shakespeare, the greatest English dramatist, was overhauled in order to suit the requirements of David Garrick (329, 160), the greatest English actor.

A steady decline in the literary quality of the drama synchronizes with the growing disposition of the actor to choose material most likely to enhance his personal reputation. On the other hand, Garrick revolutionized acting by the naturalism of his performances and his common sense as a stage-manager.

The Development of Naturalism

The next step in the story of drama is its gradual development towards a more natural interpretation of life both in dramatic composition and theatrical rendering. There has been no great revival of drama during the nineteenth and the present centuries comparable with that accompanying the Renaissance; but there has been a steady trend in one direction. The personages in plays began more and more to behave as they would in ordinary life, according to average opinion. The actor no longer declaimed or "sawed the air"; he dressed his part naturally and adapted his voice and gesture to the style of every-day existence. The art of the theatre tended more and more towards an accurate and detailed representation of surroundings. The desire for actuality combined with drama began, which has made possible the invention and success of the cinematograph.

This new trend was by no means a logical or inevitable development of the original purpose of dramatic exhibition. It was, for example, entirely foreign to the Greek conception of dramatic art. But drama always tends to approximate to its age-long function of mirroring the life of a people, and we find nineteenth-century drama reflecting the preoccupation of

mankind with materialistic problems which lent themselves to "realistic" treatment. Much has been written about so-called "realism" in art, but it amounts to no more than the adaptation of means to express the material, as apart from the spiritual, content of life.

Disappearance of the Conventional Hero

The old types of drama are disappearing. Romantic drama gives way before the development of domestic drama, in which the chief character is still regarded as the "hero," although his actions are rather psychologically interesting than conventionally heroic. In France, however, the romantic movement was fanned into flame again by the revolutionary ardour of Victor Hugo (1802-65) (895), and the torch was handed down to Alfred de Musset (1810-57) (1560) and Edmond Rostand (1868-1918) (1570), whose poetic drama, *Cyrano de Bergerac* (1897), combines something of the richness of the Renaissance spirit with the delicacy and sensitiveness of a very much more refined age.

During the Victorian era in England, Tennyson (1809-92) (1031), Browning (1812-89) (1404) and Swinburne (1837-1909) (1578) had written poetic dramas which belong rather to the study than to the stage. The Belgian Maeterlinck (b. 1862) (1555) invented a new form of prose drama symbolizing the inner life of the individual. It proved too frail a product to be suitable for performance by human actors, although *Pelléas et Mélisande* and *Mónna Vanna* enjoyed a short vogue. Maeterlinck (1555) might be described as the Sophocles of the marionette theatre, an institution of very early origin which may yet play an important part in the later story of drama.

Problem Plays

Bereft of the true spirit, romantic drama becomes merely an affair of costume and clashing swords. The dramatists who have something to say seek their inspiration more and more in the affairs of actual life. The first wave of "realism," which resulted in the problem plays of Dumas fils (1802-70) (1533), the brilliant, if soulless, "situation" plays of Sardou (1831-1908) (1572), and in England the delightfully human comedies of T. W. Robertson (1829-71), was followed by a new impulse which, while it still sought to interpret actual life, did so with a deeper aim. Once more an attempt was made to use the form of the drama as an instrument capable of expressing the highest standards of human conduct, as well as of providing amusement.

The outstanding figure at the head of this movement was the Norwegian, Henrik Ibsen

(1084-5, 1570). Beginning as a poet and dramatist of the romantic school, he created a new form of drama in which the characters, although they dress and talk in a manner which produces a wellnigh perfect illusion of actual life, express emotions and philosophical views of the uncommonest description. In the dramas of Ibsen (745) we see, as we saw in the case of Greek drama, a calculated attempt to interpret human existence in the light of something higher and nobler than itself. Ordinary life is transfused by spiritual vision. The spectator of an Ibsen play is interested in something more than the unravelling of a coil of human circumstance. He sees society analysed to its roots, and the soul of man laid bare.

Björnson's Saga Dramas

Norwegian drama sprang from the myths and legends, both pagan and Christian, in which that country abounds. The early dramas depicted the brave deeds of Viking warriors. A fantastic element was provided by the countryside stories of elves and goblins. In the Saga dramas of Björnstjerne Björnson (411), such as *Sigurd Slembe* (1862) and *Sigurd the Crusader* (1862), the conflict between the old pagan beliefs and Christian idealism is expressed. But this dramatist who was the friend and rival of Ibsen, also wrote many modern comedies satirizing various aspects of civilization. *The Editor* (1874) reveals the methods of newspaper proprietors, and in *A Bankruptcy* (1875) Björnson shows us the outer and inner life of a modern Norwegian family.

Ibsen's "Peer Gynt"

In Norway the transition from romantic and historical drama to that of everyday life was very rapid. Ibsen began with Saga dramas, interpreting the ancient legends in a more universal spirit than his predecessors. In his poetic drama *Peer Gynt* (1867), the hero of which grows from a peasant lad imbued with romantic yearnings into a man of the modern world deeply conscious of its wrongs and his own errors, he drew an unforgettable picture of the soul of modern man emerging from pagan ignorance into the light of Christian truth and scientific investigation.

Ibsen then turned his attention to the body of social life, and mercilessly exposed its defects and diseases in *Pillars of Society* (1877), *A Doll's House* (1879), *Ghosts* (1881), and *An Enemy of the People* (1882). In these plays Ibsen's passion as a reformer of mankind was the leading motive. But he was also the greatest master of stagecraft in the nineteenth century. It was Ibsen who originated the latest of all developments of theatrical art, that which lifts

it once more above the level of an entertainment and brings it closer to the original purpose of dramatic exhibition. By the consummate skill with which he unravelled his deep-laid plots, and the magical "reality" with which he imbued his characters, he created in the minds of his audience an illusion of actual co-operation in the scenes enacted before them. Witnessing the climax of an Ibsen play, we forget that we are seated in a theatre, and feel ourselves to be invisible and silent participators in a crisis of actual life.

Ibsen's Widespread Influence

Thus, after centuries of fluctuating purpose, the drama became once more the fitting vehicle for the expression of man's noblest thoughts and emotions. So widespread was the influence of Ibsen that even the theatre of amusement was affected by it, and became at once more workmanlike and more lifelike. Literary men and poets began to turn their thoughts towards the stage. The popular drama had sunk to a low ebb owing to the machine-made character of the plays produced. The old stock comedies and melodramas languished, and, although they still survive in lingering forms and are occasionally re-galvanized into life by the genius of the actor, they are not likely to become prominent again. With the gradual disappearance of these artificial plays the old fixed type of character also vanished.

Interpreting Modern Life

During the early part of the twentieth century European drama more directly followed the example of Ibsen. In Germany, Hauptmann, (b. 1862) (1544), and Sudermann (b. 1857) (1577), in France, Brieux (b. 1858), in Sweden, Strindberg (1849-1912) (1577), in England Sir A. W. Pinero (b. 1853) (1566) and Bernard Shaw (b. 1856) (663), all endeavour to interpret life with a serious purpose. An earnest questioning spirit informed these dramas, in which the characters were brought together in order to work out some vital problem of human existence.

The clash of temperament, such as in Hauptmann's *Lonely Lives* (1891) or Sudermann's *The Joy of Living* (1902); the reaction of the individual against social customs, as in Brieux's *The Three Daughters of Monsieur Dupont* (1897), the effect of past actions on the present as in Pinero's *The Profigate* (1889), or the comedy of clashing ideas, as in Bernard Shaw's *Man and Superman* (1905), are themes all more or less derived from the Ibsen example. Sometimes, as in the case of Strindberg's tragedy *The Father*, the probing into human conscience becomes morbid and is accompanied by an almost unendurable pathos.

The Modern Method

A glance back at the Greek drama will reveal the essential difference in method between it and our own serious drama. The Greek chorus plunged the spectator at once into the tragic mood and sustained him during the whole traffic of the stage in the contemplation of horror and woe. Modern drama rises by slow degrees to a climax, a method which is probably best adapted to the condition of modern nerves.

The curtain often rises upon some quiet scene—the assembly of a family or a social gathering. The stage may even be deserted at first while the audience absorbs the surroundings, which, expressed by the modern art of scene-painting, lighting effects and stage furnishing, have far more significance than the Greek background. By the end of the first act probably little has happened, but the audience has become thoroughly acquainted with the characters concerned and is able to speculate upon their ultimate actions and the consequences of them.

Suspense, which to the Greeks meant the sustaining of a note struck from the beginning of the action, is in modern drama complicated by mystery and uncertainty, and leads up to a dénouement. Greek drama tells of something that *has* happened; modern drama shows us something *happening*, and invites us to share in the emotions of the people concerned.

It remains to be seen whether the modern method is capable of reaching the sustained heights of Greek drama. But it is impossible to understand the story of drama without realizing the difference between its present course of development and that of its original construction.

DRAMATISTS OF TO-DAY

So far the twentieth century has not produced a dramatist comparable with the masters of former ages. In England the theatre has been enlivened by the comedies and domestic dramas of Sir A. W. Pinero (1866), Alfred Sutro (b. 1863) (1878), Oscar Wilde (1856–1900) (1889), Hubert Henry Davies (1869–1917) (1931), W. S. Maugham (b. 1874) (1957), Sir J. M. Barrie (b. 1860) (1935), Bernard Shaw (b. 1856) (663), Granville Barker (b. 1877) (1918), John Galsworthy (b. 1867) (1939), and others; but of these brilliant writers only Pinero, Galsworthy, and Bernard Shaw may be said to have taken the all-important step that divides the playwright from the dramatist.

French drama remains at a constant level of excellence, with amusement as the leading motive. In Germany, the home of scientific enterprise, the theatre has undergone many experiments, and serious drama has to some

extent been obscured in a maze of theories, the latest being "expressionism." Irish drama, stimulated by the efforts of W. B. Yeats (b. 1865) (1891) and Lady Gregory, both dramatists of distinction, rose to the level of J. M. Synge's (1871–1909) (1878) *Playboy of the Western World*, a brilliant comedy which, however, rather echoed Elizabethan drama than heralded a new period.

The Russian Theatre

America has yet to develop a national drama, although that country abounds in promising playwrights. In Russia, the home of ballet and choreographic display, the theatre has developed beyond the growth of a national drama worthy of it, and has consequently become the field for experiment in the production of international drama. Tolstoy (1828–1910) (81), and Gogol (1809–52) (1541), contributed to the earlier literary drama, and in modern times Maxim Gorky's powerful pictures of Russian peasant life and the unique art of Anton Tchekhov (1860–1904), as expressed in *The Cherry Orchard* and *Uncle Vanya*, stand out as individual achievements.

More recent plays of outstanding merit are *Jane Clegg*, a forceful, realistic tragedy of modern domestic life, by St. John Ervine, who, although Irish by birth, has become cosmopolitan in his choice and handling of dramatic material, and *Beyond the Horizon*, by Eugene O'Neill, an American playwright who has made the drama of hysteria his special province. In 1922–3 a symbolical melodrama, *R. U. R. (Rossums Universal Robots)*, showing the clash between mankind and a race of mechanical men who ultimately turn upon their makers and rule the world, the work of Karl Capek, a young Czecho-Slovakian playwright, created a stir in two continents by its striking and apposite moral.

George Kaiser's *From Morn to Midnight*, a grim picture of the futility of mere monetary gain, shows the tendency of the German drama towards satire and seriousness of intention.

The Purpose of Drama

The fundamental purpose of drama remains unaltered. It is still an imitation of men's actions, designed to serve the double purpose of amusing them and inspiring them, but it has become wider in range. Perhaps its greatest hope lies in the fact that the most sordid patches of life and the least heroic of characters may be dramatically treated so as to illumine human nature and reveal its inmost, undefeatable aspirations, its complex but ever progressive aims, its baffling mixture of good and evil.

A CHRONOLOGICAL HISTORY OF THE DRAMA

GREEK TRAGEDY

<i>Place</i>	<i>Date</i>	<i>Name</i>	<i>Plays</i>
Pre-Æschylus ..	535-499 B.C.	Choerilus Phrynechus Pratinas Thespis	Capture of Miletus. (Introduced an actor.)
Classical Period	499-405 B.C.	Æschylus Sophocles Euripides Agathon	The Persians, Agamemnon (trilogy) and Eumenides (trilogy). Oedipus Tyrannus, Antigone, Electra. Medea, Phædra, Alceste.
Period of Decline	Uncertain	Euphron Euripides II Sophocles II	Oedipus at Colonus.

GREEK COMEDY

Old Comedy ..	About 460-400 B.C.	Cratinus Crates Eupolis	The Clouds, The Wasps, The Birds, The Frogs.
Middle Comedy	400-338 B.C.	Aristophanes Eubulus Antiphanes	
New Comedy ..	338-280 B.C.	Alexis Philemon Meander Diphilus	

ROMAN TRAGEDY

After Punic War	Began 240 B.C.	Livius Andronicus Nævius Q. Ennius	Trojan Cycle. The Wolf. Euripidean tragedies.
	4 B.C.-A.D. 65	Seneca	Octavia.

ROMAN COMEDY

	210 B.C. 250-150 B.C. 254-184 B.C. 190-159 B.C.	Plautus Terence	The Atellane tables (native). The Palliata (imitation Greek). Original comedy. Self-Tormentor. The Mother-in-law.
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MEDIÆVAL DRAMA

France	12th century	Jean Bodel	Adam (liturgical drama). St. Nicholas.
	1400		Mystère du siège d'Orléans (chronicle drama).
Italy	1470 1261-1330	Albertino Mussato	Maistre Pierre Pathelin (early comedy). Eccerinus (Senecan). Latin comedies.

Black figures denote pages where further information is given

A Chronological History of the Drama (*contd.*)

MEDIEVAL DRAMA (*contd.*)

Place	Date	Name	Plays
Spain	12th century	J. de la Enzina	Three Kings' Epiphany (religious). Dramatic eclogues.
Germany ..	1328		The Wise and Foolish Virgins (religious). Anti-Christus (religious). Shrove-Tuesday Plays, religious, with comic interludes.
England ..	1110 12th to 16th century 14th century (1529) (1539)	Sir David Lyndsay ..	Play of St. Katharine (religious). Miracle, Mystery, and Morality plays. The Chester Plays. The York Plays. The Towneley Plays. The Digby Mysteries. The Harrowing of Hell. Everyman (morality). Satire of the Three Estates.

RENAISSANCE DRAMA

France ..	1540 1552	George Buchanan .. Etienne Jodelle ..	Johannes Baptiste (tragedy). Cléopâtre captive (tragedy). Eugène (comedy).
	1620-55	R. Belleau ..	La Reconneue (comedy).
	1601-07	Cyrano de Bergerac ..	Agrippine (tragedy).
Italy ..	1499	G. de Soudéry ..	L'Amour Tyrannique.
	1544-95	A. da Pistoia ..	Pamfilia (native tragedy).
	1526-27	Tasso ..	Torrismondo (tragedy).
	1489-1527	Aretino ..	Orazia.
	1472	Niccolo Machiavelli ..	The Magic Draught (comedy).
	1573	A. Politian ..	Orfeo (pastoral drama).
Spain ..	1499	Tasso ..	Aminta (pastoral drama).
	1510?-1565?	Lope de Rueda. (Inventor of Spanish stage.)	Calisto and Meliboea (tragi-comedy). Comedies and eclogues.
	1577	G. Bermudez ..	Inez de Castro.
	1580	C. de Virues ..	Dido (tragedy).
	1584-88	Cervantes ..	Poetic drama.
	1590	Lope de Vega ..	1,500 plays, tragedy and comedy.
Germany	1495-1576	Hans Sachs ..	Numerous "dialogues" based on folklore.
	1450-1528	Jacob Wimpheling ..	Stylpho (comedy).
	1485	J. Kerckmeister ..	Codrus (comedy).
	1512	Sebastian Brant ..	Hercules in Bivio (tragedy).
England	1552-3	Nicholas Udall ..	Ralph Roister Doister } native Gammer Gurton's Needle } comedy.
		Bishop Still or Dr. John Bridges	
	1548	Bishop Bale ..	King Johan (chronicle play).
	1562	T. Norton and T. Sackville	Gorboduc (first English tragedy).
	1554	John Lyly ..	Endimion (pastoral drama).
	1558	George Peele ..	Chronicle of Edward I.
	1567-1601	Thomas Nashe ..	
	1558-1625	Thomas Lodge ..	
	1564-1607	Henry Chettle ..	Numerous chronicle plays and comedies.
	1553-1633	Anthony Munday	
	1560-1592	Robert Greene ..	
	1559-1634	George Chapman	
	1538-94	Thomas Kyd ..	The Spanish Tragedy.
	1564	Christopher Marlowe	Tamburlaine the Great. Edward II. Doctor Faustus.

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<i>Place</i>	<i>Date</i>	<i>Name</i>	<i>Plays</i>
England (<i>contd.</i>).	1564-1616	William Shakespeare	The Contention of York and Lancaster, Henry VI, Richard III, The Comedy of Errors, Titus Andronicus, The Taming of the Shrew, Love's Labour's Lost, Romeo and Juliet, A Midsummer Night's Dream, The Two Gentlemen of Verona, King John, Richard II, The Merchant of Venice, Henry IV (Part I), Henry IV (Part II), Much Ado about Nothing, Henry V, Julius Caesar, The Merry Wives of Windsor, As You Like It, Hamlet, Twelfth Night, Troilus and Cressida, All's Well that Ends Well, Measure for Measure, Othello, Macbeth, King Lear, Antony and Cleopatra, Coriolanus, Timon of Athens, Cymbeline, The Winter's Tale, The Tempest, The Two Noble Kinsmen (part only), Henry VIII (part only).
	1573-1637	Ben Jonson	Every Man in his Humour (comedy), Cataline (tragedy), The Alchemist, The Silent Woman, Volpone.
	1570-1641	Thomas Dekker	The Shoemaker's Holiday.
	(1586)	John Ford	The Lover's Melancholy.
	1570-1627	Thos. Middleton	Women Beware Women.
	1579-1625	John Fletcher	The Maid's Tragedy.
	1586-1616	Francis Beaumont	Philaster.
	1583-1600	Philip Massinger	A New Way to Pay Old Debts.
	1596-1666	James Shirley	The Wedding.

SEVENTEENTH CENTURY DRAMA

France	1606-1684	P. Corneille	Cid, Horace, Cinna, Polyeucte, Rodogune. } Classical
	1639-99	Jean Racine	Bérénice, Mithridate, Phèdre. } Revival.
	1622-1673	Jean Baptiste Molière ..	Les Précieuses Ridicules, Sganarelle, L'Ecole des Maris, L'Ecole des Femmes, Le Mariage Forcé, Tartuffe, Le Misanthrope, Le Bourgeois Gentilhomme, Les Femmes Savantes, Le Malade Imaginaire.
Italy	1640-55	Antoine Montfleury ..	School of Molière.
	1538-1615	G. B. della Porta ..	Classical and romantic comedy.
	1668-1750	A. Zeno	Pastoral comedy.
Spain	1698-1782	P. Metastasio ..	
	d. 1648	Tirso de Molina ..	Don Juan comedies.
Germany ..	1600-81	P. Calderon	El Magico Prodigioso } Secular.
	1665-1684	D. C. Von Lohenstein ..	Life is a Dream
	1616-56	J. Klay	Cleopatra (first German tragedy).
	1642-1708	Chr. Weis	Religious dramas.
England ..	1608-68	Chr. Weis	Comedy (native).
	1608-68	Sir William Davenant ..	The Siege of Rhodes (opera).
	1631-1700	John Dryden	All for Love (tragedy).
	1652-85	T. Otway	Venice Preserved (tragedy).
	1660-1746	T. Southerne	The Fatal Marriage (tragedy).
	1634-91	Sir George Etherege ..	The Man of Mode (comedy).

Black figures denote pages where further information is given

A Chronological History of the Drama (*contd.*)

SEVENTEENTH-CENTURY DRAMA (*contd.*)

Place	Date	Name	Plays
England (<i>contd.</i>)	1642-92	Thomas Shadwell ..	The Sullen Lovers, The Humorists.
	1640-1716	William Wycherley ..	The Plain Dealer, The Country Wife
	1670-1729	William Congreve ..	The Old Bachelor, The Double Dealer, The Way of the World.
	1664-1726	Sir John Vanbrugh ..	Love's Last Shift, The Provoked Wife.
	1677-1707	George Farquhar ..	The Recruiting Officer.
	1671-1757	Colley Cibber ..	The Careless Husband.
	1672-1729	Sir Richard Steele ..	The Conscious Lovers.
			} Restoration comedy

EIGHTEENTH-CENTURY DRAMA

France .	1694-1778	François Marie Voltaire ..	Merope, Mahomet, Irène (tragedies).
	1713-84	D. Diderot	Le Pere de famille (poetic drama)
	1732-99	Pierre Augustin Beaumarchais	The Barber of Seville, The Marriage of Figaro (drama of intrigue)
Italy .	1668-1747	A. R. Le Sage	Crispin Rival de son Maître (farce), Turcaret (comedy of real life)
	1707-93	C. Goldoni	La Donna di Garbo } Restored L'Impostore } comedy La Pamela }
	1760-1825	Antonio Simone Sografi	} Sentimental drama.
Spain .	1731-1815	Pietro Napoli Signorilli	
	(1750)	Montiano ..	Virginia.
	(1726)	Nicolas Moratin ..	Petite-Maitresse (comedy), Hormesinda (historical drama) (1770)
Germany.	(1775)	Jovellanos ..	The Honoured Culprit (comedy)
	1720-81	G. E. Lessing ..	Miss Sara Sampson (drama of real life), Minna von Barnhelm (comedy), Nathan der Weise (tragedy).
	1724-1803	F. G. Klopstock ..	Religious dramas.
	1736-1809	G. K. Pöchl	Pastoral plays.
	(1762)	C. M. Wieland	Translations of Shakespeare.
	1752-1831	M. F. von Klingner ..	The Twins, Soldiers
	1762-1806	J. A. Leisewitz	Julius von Talent } English influence.
	1751-92	M. R. Lenz	The Governor
	1749-1832	Johann Wolfgang von Goethe	Gotz von Berlichingen } Romantic Iphigenie auf Tauris } and classical Egmont } revival Faust }
	1759-1806	Johann Christoph Friedrich von Schiller	The Robbers Don Carlos William Tell The Bride of Messina Wallenstein Maria Stuart Cato (tragedy). London Merchant. Irene (tragedy). Douglas (tragedy). The Gentle Shepherd (pastoral drama). The Beggar's Opera (comedy). The Good Natured Man } Comedy. She Stoops to Conquer } The Jealous Wife } Comedy. The Clandestine Marriage } The Rivals } Comedy. The School for Scandal }
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England	1672-1719	Addison ..	The Tragedy of Cato
	1693-1739	G. Lillo ..	London Merchant.
	1700-84	Samuel Johnson	Irene (tragedy).
	(1757)	John Home	Douglas (tragedy).
	(1725)	Allan Ramsay	The Gentle Shepherd (pastoral drama).
	1685-1732	John Gay	The Beggar's Opera (comedy).
	1728-74	Oliver Goldsmith	The Good Natured Man } Comedy. She Stoops to Conquer } The Jealous Wife } Comedy. The Clandestine Marriage } The Rivals } Comedy. The School for Scandal }
	1732-94	G. Colman	The Jealous Wife } Comedy. The Clandestine Marriage } The Rivals } Comedy. The School for Scandal }
	1751-1816	R. B. Sheridan	The Rivals } Comedy. The School for Scandal }
	1792-1822	P. B. Shelley	The Cenci.
	1788-1824	Lord Byron	Sardanapalus.

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NINETEENTH-CENTURY AND MODERN DRAMA

<i>Place</i>	<i>Date</i>	<i>Name</i>	<i>Plays</i>
Germany	1773-1853	Johann Ludwig Tieck ..	St. Genova, The Emperor Octavian.
	1767-1845	A. W. von Schlegel ..	Ion } Classical.
	1772-1829	E. von Schlegel ..	Alarcos }
	1813-1865	O. Ludwig ..	The Fatal Fork.
	b. 1862	Gerhardt Hauptmann ..	Die Weber, Hannele, The Sunken Bell.
	b. 1865	Max Halbe ..	Jugend.
	b. 1857	Hermann Sudermann ..	Heimat, The Joy of Living.
	b. 1874	Hugo von Hofmannsthal	Elektra, Oedipus (modern treatment of classical themes).
France	1802-85	Victor Hugo ..	Hernani, Le Roi s'amuse, Ruy Blas, Les Burgraves
	1797-1863	A. de Vigny ..	Chatterton
	1804-76	George Sand ..	Claudel (pastoral comedy).
	1810-57	A. de Musset ..	André del Sarto.
	1820-89	E. Augier ..	La Ciguë, Gabrielle.
	1791-1861	E. Scribe ..	Bertrand et Raton, Le Verre d'Eau, Adrienne Lecouvreur.
	1824-95	A. Dumas (fils) ..	La Dame aux Camélias, L'Etrangère, Francillon.
	1842-1908	F. Coppée ..	Les Jacobites, Pour le Couronne.
	1837-99	Henry Becque ..	La Parisienne.
	1857-1915	Paul Hervieu ..	Les Paroles Restent, Les Tenaillles.
	b. 1858	Edmond Brieux ..	Les Trois Filles de M. Dupont (Ibsen influence), Blanchette.
	1868-1918	Edmond Rostand ..	Cyrano de Bergerac, L'Aiglon.
	1838-1908	Victorien Sardou ..	A Scrap of Paper, La Tosca, Fédora, Divorçons.
	b. 1862	Maurice Maeterlinck (Belgian) ..	Pelléas et Mélisande, Monna Vanna. L'Intruse, Mort de Tintagiles (marionette drama), The Blue Bird.
	b. 1885	Sacha Guitry ..	Lacolef, Pasteur.
	1844-1925	Anatole France ..	Cranquebille.
Italy England	b. 1864	Henri Bernstein ..	Le Voleur, Samson.
	1809-92	Gabriele D'Annunzio ..	La Gioconda.
	1812-89	Alfred, Lord Tennyson ..	Queen Mary, The Cup, Becket.
		Robert Browning ..	Stafford, Blot on the 'Soutcheon, Pippa Passes.
	1837-1909	A. C. Swinburne ..	Rosamund, Queen of the Lombards; Mary Stuart, Atalanta in Calydon.
	1822-88	Matthew Arnold ..	Empedocles on Ætna.
	b. 1840	Thomas Hardy ..	The Dynasts.
	1857-1909	John Davidson ..	Self's the Man.
	1867	Stephen Phillips ..	Paolo and Francesca, Herod (poetic drama).
	1784-1862	Sheridan Knowles ..	The Hunchback, Old Maids.
	1803-73	Bulwer Lytton ..	The Lady of Lyons, Richelieu.
	1834-84	H. J. Byron ..	Our Boys.
	1829-71	Thomas William Robertson	David Garrick, Society, Caste, School, Ours.
	1814-84	Charles Reade ..	Masks and Faces, Peg Woffington.
	1836-1911	W. S. Gilbert ..	The Palace of Truth, Pygmalion and Galatea, Libretto of the Gilbert and Sullivan operas.
	1828-91	W. G. Wills ..	Charles I, Eugene Aram, A Royal Divorce.
	b. 1855	Sir A. W. Pinero ..	The Money-Spinner, The Hobby-Horse, Lords and Commons, The Magistrate, (comedies), Dandy Dick, Sweet Lavender, The Profligate, The Second Mrs. Tanqueray, His House in Order, The Thunderbolt, Mid-Channel.

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NINETEENTH-CENTURY AND MODERN DRAMA (contd.)

Place	Date	Name	Plays
England (contd.)	b. 1851	Henry Arthur Jones	Michael and his Lost Angel (drama).
	b. 1856	G. Bernard Shaw	Widower's Houses, The Philanderer, Mrs. Warren's Profession, Arms and the Man, Candida, The Man of Destiny, You Never Can Tell, Caesar and Cleopatra, Man and Superman, John Bull's Other Island, Major Barbara, The Doctor's Dilemma, Getting Married, The Showing Up of Blanco Posnet, Misalliance, The Dark Lady of the Sonnets, Fanny's First Play, Androcles and the Lion, Over-ruled, Pygmalion, Heartbreak House, Great Catherine and Playlets of the War, Back to Methuselah, Saint Joan.
	1848-1914	Sydney Grundy	The Greatest of them All.
	1856-1900	Oscar Wilde	Lady Windermere's Fan, An Ideal Husband, The Importance of Being Earnest.
	b. 1860	Haddon Chambers	The Tyranny of Tears.
	b. 1860	Sir J. M. Barrie ..	Quality Street, The Admirable Crichton, Peter Pan, What Every Woman Knows, Dear Brutus, Mary Rose.
	b. 1877	G. Granville Barker	The Marrying of Anne Leete, Waste.
	1860 1900	St. John Hankin	The Charity that Began at Home.
	b. 1863	Alfred Sutro ..	The Walls of Jericho, The Perplexed Husband.
	b. 1874	W. S. Maugham	Home and Beauty, Our Betters.
	1860 1917	Hubert Henry Davies	Mrs. Gorrings's Necklace, The Mollusc.

SCANDINAVIAN DRAMA

1530 1607	J. Ranch	Sixteenth-century Scriptural drama.
1684-1754	L. Holberg	Ulysses of Ithaca.
1832-1910	Björnsterne Björnson ..	Between the Battles, Sigurd the Crusader (Saga dramas). The King. A. Bankruptcy, The Editor (modern comedy).
1828-1906	Henrik Ibsen	Catalina, The Vikings Barrow, Mistress Inger at Ostraat, The Feast at Solhaug, The Pretenders, Brand, Peer Gynt (Saga dramas). Love's Comedy, The Young Man's League, Emperor and Galilean (transition period). The Pillars of Society, A Doll's House, Ghosts, An Enemy of the People, The Wild Duck, Rosmersholm, The Lady from the Sea, Hedda Gabler, The Master Builder, Little Eyolf, John Gabriel Borkman, When We Dead Awaken (modern drama).

IRISH DRAMA

b. 1865	W. B. Yeats	Cathleen-ne-Hoolihan, The Hour-Glass, The King's Threshold.
	Lady Gregory	Spreading the News, The White Cockade, The Rising of the Moon.
1871-1900	J. M. Synge	Riders to the Sea, Well of the Saints, The Playboy of the Western World.
b. 1863	St. John Ervine	Jane Clegg (domestic tragedy).

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Books for the Student of Drama

Dramatists of the Present Day Thomas Purnell
 Dramatists of the Restoration J Vaidment and W H Logan.
 Characters of Shakespeare's Plays W Hazlitt
 Essays on the Drama Sir T Martin
 Essay on Comedy G Meredith
 History of Theatrical Art in Ancient and Modern Times L von
 Cossel
 The Theatre of the Greeks J W Donaldson.
 The Attic Theatre A E Haigh
 The Medieval Stage E K Chambers
 Ancient Cornish Drama E Norris
 The Miracle Play in England S W Clarke.
 The Spanish Drama G H Lewis
 Shakespeare's Predecessors in the English Drama J A Symonds.
 Our Stage and its Origins E F Spence
 Statues of Shakespeare C Knight

Shakespeare and the Modern Stage Sir G Lee.
 The Quintessence of English G B Shaw
 Elizabethan England W Harrison
 About the Theatre W Archer
 Modern Dramatists A Duke
 On the Art of the Theatre G Craig
 Buzz! Buzz! Essays of the Theatre J Agate
 Contemporary Dramatists Graham Sutton
 The Chief British Dramatists B Matthews and P. R. Leider.

BIOGRAPHY

Sheridan Mrs Oliphant
 Life of Shakespeare Sir G Lee
 The Man Shakespeare and his Tragic Life Story F Harris.
 Life of Molière H M Trollope
 Life of William Congreve E Gosse

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Henrik Ibsen G Brandes
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 Marston, Beaumont and Fletcher K Deighton
 My Story Hall (also)
 Life of Henry Irving A Brereton
 Personal Reminiscences of Henry Irving Bram Stoker
 Life of Garrick P Fitzgerald
 Life and Life-work of Samuel Phelps W M Phelps and J Forbes
 Robertson
 Reminiscences of J L Toole J Hatton

Life and Adventures of Edmund Kean J F Molloy
 The Incomparable Siddons Mrs C Parson
 Sarah Bernhardt J Huret
 The Story of My Life Ellen Terry
 The Kembles P Fitzgerald
 The Bensons Sir Squire and Lady Bancroft
 George Bernard Shaw A Henderson
 T W Robertson T E Pemberton
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 Barlow and the Barlow Plays J A Hart

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THE PAST AND PRESENT OF PHILOSOPHY

The Noble Efforts of Thinkers and Reformers, from Thales to Bergson

MAN, according to the findings of modern science, has not long been a thinker. For countless centuries he existed in a world about which he could not think accurately. He thought only about special and urgent problems, such as how to escape from an enemy or to protect himself from the elements. He wondered and wove dreams, and all sorts of ideas came into his head, but he did not reflect deeply or consistently.

Even to-day real thought is rare. The vast majority of mankind does not think very much except about private aims. To think at all is difficult. Probably an hour at a stretch of sustained thinking is enough to tax the powers of the normal individual. Most of our thinking, in a generalized sense, has been done for us by men of the past who, by study and discipline, trained themselves to think accurately and to co-ordinate human knowledge.

To these thinkers and reformers of thought we owe the intelligible universe. They were the first to determine the nature of things. So far as the human mind is capable of grasping the truth they did so, and established the laws of truth-seeking. They were perpetually engaged in the task of clearing away false conceptions about the world and human relationships. They did not always agree about their conclusions, but disagreement led to argument, which still further strengthened the reasoning power of man.

The Development of Language

The early thinkers "talked" their thoughts. Language had already reached a high stage of cultivation before the peripatetic philosophers, the wise men who debated in the street or in some convenient grove, made their appearance. But language had been employed hitherto chiefly as a medium for the telling of tales and for social intercourse. The poets sang of great happenings; orators swayed their audiences by eloquent appeals to feeling and sentiment.

But there was little real thought in these utterances. They were picturesque rather than thoughtful. Homer, in his colossal epic of the Trojan wars, gives us magnificent pictures of human life, accompanied by the expression of noble sentiment and feeling, but he does not inquire deeply into the causes of things.

We do not find evidence of real thought much before the sixth century B.C. Of course

there was a great deal of mental activity which expressed itself in the organization of peoples, in government, in the establishment of cities and trading arrangements, in art and literature. But this was not systematized thought. Men had ideas which they put into operation, very much in the way that a child applies its ideas about things. In the early civilizations, when populations were limited and the problems of existence were few and comparatively easy of solution, no great degree of thought was necessary in order to ensure the smooth working of social life.

THE RISE OF GREEK CULTURE

Philosophy came into being when the multiplication of social life led to more and more complex situations involving a moral basis for conduct, and caused men to probe deeply into their motives and the causes and effects of universal phenomena. This thought and inquiry into the nature of things began in Greece. From the eighth century B.C. the Grecian people had steadily grown to prominence in the arts of peace and war. They were rapidly becoming the most significant people in the world in every department of human activity. They had fine fleets of ships, excellent trading arrangements, well-planned cities in which there were schools of learning and culture, and systems of government. Their language was highly developed and enriched by the work of lyrical and epic poets and orators.

The Greeks were a people divided amongst themselves owing to their system of colonization, but in all the more important matters, such as art, literature and philosophy, they were united in the common purpose of the furtherance of the Greek ideals. To this fact we owe the rapid spread of Grecian modes of thinking and the solidarity of Greek culture as the basis of all future thought and artistic endeavour in the world. There sprang into being schools of thought which dominated not only the narrow peninsula which juts out into the Ægean Sea and its neighbouring islands, but every land where men's minds were quickened to the need for inquiry and speculation about human existence.

One of the first philosophers to found a school of thought was Thales (1580), who was born about the sixth century B.C. at Miletus, in Ionia, which was then the most flourishing of the Greek colonies on the coast of Asia Minor. In many respects the school of Thales

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may be said to have constituted the first serious attempt at philosophical inquiry into the nature of things. Thales showed that the myths and legends about the origin of life with which the Grecian mind was filled were poetic interpretations based on imaginative and sometimes distorted ideas. He tried to find out the natural causes and processes of phenomena which had hitherto been accepted as due to the actions of the gods. "Nothing comes into being out of nothing," he said, "and nothing passes away into nothing."

That was only the starting-point of his investigations. He saw that everything that existed suffered change, and that there was a perpetual flux in all living things. Life was "all in motion, little streams." Whence began this universal movement? Thales thought that all things were originally water, which he called the "primary substance." In this respect he was not very far removed from the truth, for it is now known that organic life began in the sea.

Evolution Anticipated

Anaximander (610-547 B.C.), a pupil of Thales, carried this early guess-work an important stage farther (1515). Disagreeing with his master about the primary substance, he argued that there must be an inexhaustible source from which everything sprang. This he called the "Infinite" or "Boundless." He also asserted his belief in the origin of living from non-living things, and spoke of man as "like another animal, namely a fish, in the beginning"—a queerly suggestive anticipation of the evolutionary theory.

Perhaps the most important of Anaximander's speculations was his assertion that the earth was convex and round. He constructed a sun-dial and made maps. He also advanced the belief that the moon shone by means of light derived from the sun.

The Theory of Numbers

Another philosopher of the school of Thales was Anaximenes (b. 570 B.C.), who believed that the air was the primary element. A different school sprang into being with the advent of Pythagoras (d. 500 B.C.), a native of Samos, whose cosmological theory was based on numbers (1568). The views of the Pythagoreans were somewhat eclectic, and they do not seem to have affected the main stream of human thought very much, except in so far as the relation of the scales of music were determined by means of the numerical principles laid down by their founder. Pythagoras did valuable work as a mathematician and astronomer, but his theories

about the cosmos in general were rather of the kind that we should nowadays call "cranky." He believed, for example, in the transmigration of souls.

An Early Master of Thought

A greater pioneer of the thought which has revealed the essential facts of existence was Heraclitus of Ephesus (b. 500 B.C.). Many of the wise sayings of this sage and scientist have passed into the literature of immortal truths: "Man's character is his fate"; "Man is kindled and put out like a light in night-time"; "You cannot step twice into the same river, for fresh waters are ever flowing in upon you."

Heraclitus belonged to the Eleatic school, so called from the city in southern Italy where a Greek colony had settled and produced its group of philosophers, including Xenophanes (570-480 B.C.) and Empedocles (490-430 B.C.). The latter (1536) in his "Poem on Nature" first classified the elements, or "the four roots of things" into Fire, Air, Earth and Water. But Heraclitus was the master thinker of the Eleatic school. He believed in an all-pervading law of flux, all things changing continually, fed by an "ever-living fire." Life is inexhaustible and the law of nature is perpetual re-birth. The gist of his philosophy is contained in his famous analogy of the candle-flame which "appears to remain the same and yet the substance of it is continually changing. It is always passing away in smoke, and its place is always being taken by fresh matter from the fuel that feeds it."

Following a Dangerous Quest

Bold speculations such as these naturally aroused antagonism, and the early thinkers travelled a path that was dangerous as well as lonely. The Pythagoreans were suspected of political intrigue and their place of meeting was burned to the ground by the angry populace. Anaxagoras (500?-428 B.C.) (1515), perhaps the most profound of the early Greek thinkers, was tried on a charge of blasphemy, and would have been put to death but for the intervention of Pericles (1565), the wise and generous although unpopular ruler of Athens at the time.

Anaxagoras was a shrewd scientific observer, centuries before his time in some of his speculations. He anticipated the modern atomic theory, dividing all substances into units or "atoms." He held the opinion that "there is a portion of everything in everything, and that things are variously mixed in infinite numbers of seeds, each after its kind." But he was not content merely to guess at the

truth. He sought an answer to the question as to the prime cause of the phenomena which he understood so accurately. He stated his answer in the form of the doctrine of a universal mind, or, as he called it, "Nous," which "knows and arranges all things that ought to be, that were, that are and will be." In other words, he was the first, among the Greeks at least, to postulate a Supreme Being. Yet he was regarded as an atheist, and it was for this doctrine that he was arraigned and banished from Athens "as a destroyer of the gods."

Supported by Faith

When we consider that these early thinkers had nothing beyond their eyes and wits to aid them in their researches, it is nothing short of marvellous that they should have discovered so much. The modern scientist, working in his well-equipped laboratory, with instruments around him with which to test the veracity of each tentative inquiry, has the incalculable advantage of actual proof to reward his pains. These pioneers had only faith to support them in their task of unravelling the mysteries of nature.

What they established in particular was the *method of inquiry*, without which no amount of up-to-date scientific apparatus would be of any avail whatever. This applies equally to thought about human conduct. More important than knowledge about the universe in which we live is guidance as to how we shall lead our lives. As the Greeks developed their civilization this need for moral instruction became more and more urgent. They wanted to know how to order their conduct so as to avoid the suffering and confusion which inevitably arose from haphazard, thoughtless habits of life.

The "Voices" of Socrates

There thus arose a group of philosophers whose main concern was with problems of human conduct. The chief of these great moral teachers was Socrates (469-399 B.C.), who stands out among his associates not only as a fearless and independent thinker, but on account of the striking peculiarities of his teaching methods. Socrates (501) was the son of a sculptor, and in his early life studied sculpture. He received a good education, served with considerable valour in the Athenian wars toward the end of the reign of Pericles, and took some part in political life. But he decided when he was still a youth that he had a mission to perform. He heard "voices" which warned him against evil and instructed him in wisdom. He saw signs and omens.

His true life-work, he decided, lay not in art, literature, war, or politics, but in education.

When he felt that he had sufficiently disciplined himself, Socrates began to talk and argue with people whom he met in the Athenian streets. He did not set up as a moral instructor, and many of the people whom he engaged in discussion, craftsmen at their work, or young gentlemen of leisure taking the air, had no suspicion at all that they were being talked to for their own good. This was due to the singular method Socrates employed in order to achieve his purpose. He always pretended that he knew nothing at all, and was rather in need of enlightenment than capable of giving it. "I am completely in the dark about this matter," he would say, in effect: "what are your opinions?" The individual in question would then proceed to state his views, only to find himself tripped up at every step and finally shown to be utterly in the wrong by a master of argument.

Truth by Argument

The advantages of this method, which came to be called the "Socratic irony," were tremendous. Socrates knew that most people are only too ready to think that they know the truth, and he realized that to get them to state their error and then disprove it was much more effective than to make dogmatic assertions. Socrates, in fact, had no definite philosophy. His genius lay in his power of inductive reasoning. He aimed at arriving as near as possible to the truth by means of argument. "What is justice? What is piety?" he would ask; and after his listeners had given their definitions he helped them to form better ones. He believed that men behave wrongly simply through ignorance.

The Greeks misunderstood Socrates, and he died a willing martyr to the cause of truth and intellectual freedom. The charges against him were that he had defied the gods and corrupted the youth of Athens. There was no real justification for either of them, but Socrates accepted the proofs of his guilt. When the tribunal offered him a loophole of escape, he refused to take advantage of it because he believed that a man who infringed the laws, however much he might criticize them, ought to suffer the penalty.

Plato's Idealism

After the condemnation and death of Socrates his disciples fled from Athens. Among them was a young man of aristocratic birth named Plato (427-345 B.C.). To him Socrates was "the best man known to us, and the wisest and best in the world." Plato became a

great philosopher himself, wider in his survey of human thought and more deeply inspired than Socrates; but the influence of the master remained with him all his life and coloured his latest as well as his earliest writings. Socrates wrote nothing. It was Plato (501) who gave the thought of Socrates to future ages by embodying it in the literary form of the dialogue, which enabled him to carry on the tradition of the "question and answer" style of intellectual inquiry. In the earlier dialogues the thought is entirely that of Socrates, but gradually the serene spirit of Plato emerges, and, while still employing the Socratic method, soars into higher spheres of pure speculation.

Plato's philosophy was based on his theory of Ideas. Believing that men were constantly deluded by the evidence of the senses, he urged them to concentrate their minds upon abstract ideas, such as courage, piety, beauty, etc. He taught that the only true life was that of thought. All else was illusion.

Of course, there were inconsistencies in his philosophy, and nobody realized this more than Plato himself. He was always groping after new truths and trying to link his ideal world to the one of everyday existence. In his most famous work, "The Republic," he drew an allegorical picture of an ideal state in which all things work together for good.

Perhaps Plato was not so practical a teacher as the wise and learned Socrates, whose wisdom was rooted in mother-earth, but he cultivated an entirely new hemisphere of the intellect. Platonism runs like a delicate silver thread through the story of thought, and it will always be associated with the philosophy of idealism.

The School of Aristotle

Plato had established an academy at Athens, and hither, attracted by the new doctrines, had come a medical student named Aristotle (384-322 B.C.) (1516) from Stagira, in Macedonia. He learned all that he could from Plato, but after the latter's death he founded an academy of his own. He was more thoroughgoing and comprehensive in his researches than any of the preceding philosophers. He sent out students to observe the facts of nature. He laboured in every department of human thought and activity. All that was vague and shadowy in the Grecian mind he made clear and concise. He established the laws of logic and the principles of ethics. He defined drama and poetry. While he did not agree with Plato's mystical philosophy, he retained the better part of it and applied it to the affairs of practical, everyday life.

Science Based on Aristotle's Framework

Dante (448) called Aristotle "master of them that know." To-day we have few definitions of the fundamentals of existence which better those of Aristotle, and all science is founded upon the broad framework which he built. He died at the comparatively early age of sixty-two, leaving behind him but a part of the great all-embracing work which he planned. But these fragments contain the germ of the whole scheme of existence as Aristotle saw it. Unfortunately they were lost to Athens for nearly two hundred years, owing to the mistaken zeal of a disciple who carried them to Asia Minor and hid them.

Some of Aristotle's pupils tried to carry on his research work at the Lyceum, but they lacked the genius and informing spirit of the master, and the result of their labours was encyclopædic rather than comprehensive. Thus the influence of Aristotle was not felt in Greece immediately after his death; and the circulation of spurious copies of his works did much harm to his reputation. Only very gradually was the real work of Aristotle brought to light and transmitted to the ages.

Conflicting Views

Meanwhile other philosophers gained the ears of the Grecian populace. Epicurus (340-270 B.C.) taught that the attainment of happiness, so long as it is compatible with virtue and wisdom, is the true aim of life (1538). Men should neither yield themselves bestially to material pleasures nor despise them, but take them in the sweep of a life informed by noble purpose. In contrast to this view of life, the Stoic school of philosophers, founded by Zeno of Citium (342?-270? B.C.) (1592) and re-formulated by Chrysippus (280-207 B.C.), urged indifference to pleasure or pain and cultivation of the virtues for their own sake. Stoicism, however, did not take deep root in the Grecian mind; its real triumphs came when the Romans developed it as a practical philosophy which suited their genius for law and order.

The Sophists

Side by side with the great schools of thought in Greece there existed a class of educationists called the Sophists. Chief among them were Protagoras (480?-411 B.C.) (1568) and Gorgias (5th century B.C.). They were men of culture and breeding who devoted themselves to the teaching of the intellectual and social arts. They were philosophers to a certain degree, but they generally lacked profundity. The fact that they accepted payment for their lectures

earned them the unenviable reputation of trifling with the deeper truths for the sake of gain. To this day "sophistry" is a synonym for fallacious or shallow argument.

BUDDHA AND CONFUCIUS

While thought was developing thus far in the little corner of the world which belonged to the Greeks, two great pioneers, one of religion and the other of philosophy, were exercising wide sway over the minds of the Asiatic peoples. In India, Gautama Buddha founded the religious doctrine of renunciation of selfish desires; and Confucius, in China, taught the philosophy of self-control.

"Buddha" is an Indian word meaning "the incarnation of wisdom," and it was applied to Gautama by his disciples, who believed that he was a special person chosen by the gods to instruct them. He was high-born and wealthy. As a young man he lived a life of easeful content, happily wedded to his cousin, and with no more concern in his life than to rule a small district in the Himalayas.

As he grew older, however, trouble came to Gautama from certain inward questionings. He began to ask himself what good there was in an existence so smooth and tranquil. He saw that others were suffering and he sought the reason. He conversed with wise men who told him of a higher state of existence which could only be reached by fasting and voluntary self-denial. After the birth of his first child, Gautama suddenly decided to break all human ties and wander alone in search of this strange adventure of the soul.

A Philosophy of the Soul

At first Gautama was misled by the doctrines of the "wise" old men. He fasted to the point of death, and then new light dawned upon him. He realized that the salvation of the soul depended, not upon playing tricks with the body, but upon the exercise of vigorous thought. From that moment Gautama conceived human existence in sane outlines. In common with all the great philosophers he observed the vanity of men's pursuits, and he taught that the only true happiness comes from complete renunciation of selfish desires. The attainment of this state of spiritual exaltation he called "Nirvana."

The religion which Buddha founded was something quite new in the world. It was the first recognition of the inner life of man. The Greek philosophers were mainly concerned with external things and the things of the mind; but Buddhism, like Christianity, was a philosophy of the individual soul. It differed also from the Hebrew religion, which was

based upon the idea of justice and centred around the conception of a jealous Deity Who would lead His chosen people to triumph.

The Golden Rule of Confucius

Buddhism spread rapidly throughout the Asiatic countries, displacing other religions all more or less arising from the belief in some supreme authority. Sometimes, as in the case of the Chinese, the deity was regarded as a supreme ruler, the chief prince of the land, who ordained the wisest laws and customs of the country. In this respect Confucius (551-479 B.C.) stood in relation to the Chinese people almost as a god, although Confucianism never became a religion.

Like Gautama Buddha, Confucius (1529) was an aristocrat by birth. After some early wanderings he devoted his life to the education of the Chinese people. As a public official he proved himself a wise administrator and introduced many reforms. He believed in self-discipline and the cultivation of good manners. There is nothing mystical about the philosophy of Confucius. It deals with practical wisdom, with knowledge and sound principles of living. Perhaps the best known of the many wise sayings of Confucius is his Golden Rule, "What you do not like when done to yourself, do not do to others." Confucius died a disappointed man because he could not find a ruler wise and good enough to carry out his philosophy of government, but his writings profoundly influenced Chinese thought.

During the brief interval between the breaking up of Greek civilization and the rise of Christianity a Roman thinker and poet, Lucretius (98-55 B.C.), who derived his inspiration from Epicurus (1756), wrote a long poem entitled "De Rerum Natura," in which he expounded philosophical and scientific theories of a striking character. Lucretius (1554) has been called the pioneer anthropologist. His great aim was to rid men's minds of supernatural fears and beliefs, and to establish in their place scientific truths. He was one of the first to consider the race of mankind from its beginning, and to observe some sort of connected evolutionary process in all living organisms.

CHRISTIANITY

The rapid spread of Christianity had a twofold effect upon the development of thought. For a time it arrested scientific speculation, but it gave an enormous impetus to the growth of spiritual consciousness. Like the religion of Buddha, it turned men's minds inward instead of outward. The external world became of secondary importance in men's minds. Jesus,

the Founder of Christianity, taught the supreme doctrine that the Kingdom of Heaven is within. This is not the place to re-tell the story of Christianity, but the position of its Founder as a reformer of men's minds and hearts is paramount. Jesus showed the power of love, without which all the knowledge and wisdom accumulated by the Greek sages would have been of little avail in the history of the world.

When Aristotle was Forgotten

For twelve hundred years after the death of Jesus, the Church which His disciples established dominated human intelligence. It had no serious rival in the Western world, but in the East an Arabian teacher, Mohammed (571-632), developed a prophetic creed, based on the brotherhood of man, which led to the establishment of the Gospel of Islam and the religion of Mohammedanism (637). During this time the old culture was completely forgotten. Nobody read Aristotle or quoted the wise sayings of Socrates. Priests or monks preserved manuscripts in Greek or Latin, but they regarded them as curiosities of a bygone age. All the philosophies had gone into the melting-pot, and the best in them had re-emerged in Christianity. The pursuit of knowledge for its own sake was regarded as heretical.

Faith versus Knowledge

But there came a time when many wise men saw that there was no real incompatibility between acceptance of the Christian faith and the cultivation of a spirit of independent inquiry. Indeed, as early as A.D. 393-430, Augustine (1517), one of the great Fathers of the Church, attempted to restore the works of Aristotle and reconcile them with Christian teaching. He could not, however, accept Aristotle's shrewd guesses at the origin of life. He made some quaint concessions, such as that "certain very small animals may not have been created on the fifth and sixth days, but may have originated later from putrefying matter." The origin of man as a species seemed to him a heathenish conception.

Revival of Learning

It was not until nine hundred years later that a certain Thomas Aquinas (1227-74) of Naples, noted as a theologian and schoolman, advanced the view that there could be two sources of knowledge—revelation and reason. The former is derived from divine inspiration; the latter consists in what man is able to find out by his independent efforts. Aquinas (1516) wrote several books in which he tried to show how man could be at once religious and

philosophical. His writings had an important bearing upon the reformation of the Church later on, and did much to bring about a revival of independent thought.

Other scholars and promoters of thought in the early Middle Ages were Duns Scotus (1265-1308), known as "the subtle doctor" on account of his subtle reasoning powers; Raymond Lully (1234-1315), Spanish soldier, philosopher and chemist; and Albertus Magnus (1193-1280), who was one of the first mediæval philosophers to accept the idea of a spherical world (1514).

Bacon's Fight for Freedom of Thought

The greatest and most daring thinker of the Middle Ages was the English Franciscan friar, Roger Bacon (1214-92). Just as Aristotle was the parent of the original scientific impulse, so Bacon (417) fathered the revival of it and prepared men's minds for the truth. His difficulties were immense. He had to overcome the prejudice of the Church against "alchemy" and natural science. He was regarded as a heretic because he attempted to explain the cause of the rainbow. His experiments in mathematics, in astrology, and in optics, aroused the suspicion that he dabbled in the black arts. Although his life was blameless and he was in many respects an orthodox churchman, he was detained in prison for ten years and forbidden to continue his researches.

The value of Bacon's contribution to human thought lies not so much in his work as a practical scientist, although he is said to have had a share in the invention of the telescope, as in the example he set to the scientific thought of his age. He was no advocate of dry-as-dust learning. He regarded with disfavour the pedantic study of classical literature which was taking place during his time. He saw that there was a great danger in the study of the Greek and Latin masterpieces, many of which were badly translated. Men's minds were liable to become cramped by the acceptance of dogma and authority. What Bacon wanted to bring about was a revival of independent thought.

THE RENAISSANCE

He could not succeed altogether, because the times were not ripe. During the centuries that followed, human thought was a curious mixture of religious dogma and scholasticism. The Renaissance, starting in Italy, spread rapidly throughout Europe, and produced a great revival of intellectual and artistic activity. Freedom of thought still hung fire. Literature, drama and poetry flourished, but the minds of the great poets, dramatists and essayists were still bound, on the one hand by classicism and

on the other by theological dogma. Even Shakespeare (829), great and free spirit as he was, did not think so clearly and fearlessly as Roger Bacon. Passion and imagination were the dominant qualities of the former's genius.

It was an age of great scholars and educational reformers. In Italy, Marsilio Ficino (1433-99) and Joannes Argyropoulos (1416-86) and Poliziano (1454-94) translated and interpreted the Greek authors (1567). The fruits of their labours were enjoyed in England through the scholarship of William Grocyn (1446-1519), Thomas Linacre (1460-1524) (1553), and John Colet (1467?-1519), who founded St. Paul's Grammar School (1529).

Development of the Renaissance

The renaissance in culture owed much to the great patrons of learning. Pope Nicholas V (1398-1455) (1561) employed thousands of copyists upon the task of transcribing the classics, Cosimo de Medici (1389-1464) (1557), Lorenzo the Magnificent (1449-92) (1557) and Giovanni di Medici (1475-1521), by lending the support of their power and wealth, aided the growth of learning and stimulated invention and enterprise.

Translators of the Bible

The next great movement in thought originated in Germany, and it was directed towards the reformation of the Church. The Italian prophet and martyr Girolamo Savonarola (1452-98) had declaimed against the corruption of the priests and created a new spiritual consciousness in the people (1572). Earlier still, John Huss (1373?-1415) (1546) and John Wycliff (1320?-84) (1591) promoted independence of religious thought, the former by boldly challenging dogma, the latter by his English version of the Bible. The labours of these and other scholars prepared the way for Erasmus (1466-1536) and Martin Luther (1483-1546), who together brought about a great revolution in religious thought in Germany. Erasmus (1538) boldly claimed the Bible for the people :

I wish that even the weakest woman should read the Gospels—should read the Epistles of St. Paul; and I wish that they were translated into all languages, so that they might be read and understood, not only by Scots and Irishmen, but also by Turks and Saracens. I long that the husbandman should sing portions of them to himself as he follows the plough, that the traveller should beguile with their stories the tedium of his journey.

Other translators of the Bible at this time were William Tyndale (1492-1536) (1509), Miles Coverdale (1488-1569) (1509), and Gregory Martin (1540-82) (1509); nor must the labours of that great pioneer the Venerable Bede

(b. 672) (1509) be omitted. This popularization of the Bible was entirely new, and the Church was opposed to it on the ground that the people, being ignorant, were incapable of interpreting its doctrines correctly. Erasmus, on the other hand, was convinced that the Bible was an education in itself. He submitted, however, to Papal authority, and it was left to Martin Luther (1554) to bring about the final breach with the established Church.

Reforming the Church

Luther advanced the doctrine of "justification by faith." His great life-work was to bring the Church closer to the people. He argued for a reasonable religion. After the famous quarrel with the Pope over the question of the abuse of indulgences he suffered imprisonment, during which he translated the New Testament into German. Upon his release he founded the movement known as the Lutheran Reformation. This had political implications which were far-reaching, and the study of which belongs more properly to history. But it was mainly a movement towards freedom of individual thought. Other men followed closely in Luther's footsteps: in Switzerland Ulrich Zwingli (1484-1531) (1592), in France Jean Calvin (1509-64) (1525), in Scotland John Knox (1505-72) (1550), all struck firm blows for liberty of conscience.

The Critical Spirit

In the secular field thought was also broadening out, and men of varied minds were grappling with human problems. A spirit of bold criticism was abroad. Sir Thomas More (1478-1535) wrote his "Utopia," an essay in philosophical idealism containing much practical wisdom (1559), and Francis Bacon (1561-1626) restated the purposes of scientific inquiry in a fable, "The New Atlantis," which described an ideal college "dedicated to the study of the works and creatures of God" (1411). Like his great namesake, Francis Bacon urged upon mankind the necessity for acquiring the habit of grasping facts.

Working New Systems

During the whole of the sixteenth, seventeenth and eighteenth centuries the world was full of thinking men who were trying to find how the human mind worked and what were the best systems of government and social order. The Italian Niccolò Machiavelli (1469-1527) wrote on the principles of political science (1554); while in Bohemia, John Amos Komenski (1592-1671), usually known as Comenius, carried the work of Bacon in philosophical realism a stage further. Rabelais

(1588) and Montaigne (1559) satirized education and probed into the psychology of human motives.

"I Think, therefore I am"

René Descartes (1596-1650), the French champion of Reason, founded the principle of "Cartesianism," which was intended to help men towards some degree of certainty in their thoughts and speculations. "I think, therefore I am," said Descartes (1532). He taught that whenever an idea enters into the head of an individual and is quite clear and distinct, that idea is *real*. Obviously, if we are to progress with our thinking, we must satisfy ourselves not only that each step is logical, but that the ideas involved are real and not mere figments of the imagination. Cartesianism led to the "Age of Reason," when men trusted implicitly to the absolute rightness of reason as apart from inspiration or revelation.

Spinoza's Pantheistic Philosophy

One of the disciples of Descartes, a sickly young man of Dutch origin, who earned a livelihood by polishing lenses for optical instruments, carried this certainty in human conjecture to its extreme limits. Benedict Spinoza (1632-77) was called the "God-intoxicated" on account of his fervent and unshakable belief in a Creator of the Universe (1576). Yet his God was so different from the God of the religionists that the latter described him as an atheist. To Spinoza the whole living universe was abundant evidence of the existence of a God. He saw, in the meanest as well as in the greatest of creatures, and in the least significant growth, manifestations of the Divine will. Spinoza had few adherents in his lifetime, but his pantheistic philosophy profoundly influenced the poetry of Goethe (193, 61) and, later, the English Lake poets.

From time to time human thought hardens and becomes inflexible, like the arteries of an old man. Ideas become fixed and convention rules the world. Then some vigorous spirit arises strong enough to break the bonds of custom. About the end of the seventeenth century the world of thought was ripe for some cataclysmal upheaval. Once more the minds of men were enslaved by empty forms of thought and outworn systems.

THE AGE OF REASON

The Age of Reason was at hand, and there arose in the person of François Marie Arouet Voltaire (1694-1778) (1003) a genius who profoundly disturbed men's minds and mocked at their complacent philosophies. In the bitter satires of this great writer we must read

not despair of human nature, but disgust with contemporary life. Voltaire believed in truth and goodness, but, seeing around him much evil and many lies, he described what he saw in the hope that the impression left on men's minds would stir them to revulsion.

Voltaire's most lasting service to human thought was his challenge on behalf of man's right to independence of mind. His life was one long struggle against moral tyranny and intellectual oppression. Several times he was obliged to flee from France. As a young man he spent some time in England, which he always regarded as the home of liberty, and where he learned much from that great pioneer of toleration, John Locke (1632-1704), whose doctrine was based on the aphorism that "Everyone may use a perfect uncontrollable liberty, provided always that it be all done sincerely and out of conscience to God" (1553).

A Champion of the People

If Voltaire heralded the revolution in French systems of thought, Jean Jacques Rousseau (1712-78) helped to bring about the Revolution in deed by his bold championship of the common people (1571). As a man Rousseau was weak and contemptible; as a philosopher he was bold, erratic, strikingly original and occasionally profound. He argued for a "return to nature" in all human institutions, and vigorously defended the rights of the people against unfair laws. Rousseau, however, was a man of feeling rather than of thought. He possessed an incomparable style of writing which enabled him to express the most outrageous paradoxes with perfect clarity. Much of the reasoning in his great work, "The Social Contract," is unreliable, but it had the effect of swaying men's minds and deeply influencing their actions.

Freedom of Thought in Religion

About this time the crust of human thought was breaking up all over Europe. New religious phases and new philosophies made their appearance. George Fox (1624-90), the son of an English weaver, founded the Society of Friends, or Quakers, the essence of whose faith was that true religion needs no church and no ritual beyond the mutual exchange of inward faith. Fox (333) travelled widely, spreading his gospel of the "light within," and, although he passed most of his life in prison, a martyr to intolerance, his adherents were many and remain to this day a power in the land. Another great religious thinker, John Wesley (1703-91), founded and organized "Methodism," based on simple faith in the message of Jesus Christ (163).

From a London pulpit, during the early part of the eighteenth century, Bishop Berkeley (1685-1753) thundered against the materialism of the age (1520). A metaphysician as well as a religionist, he advanced the theory that matter had no real existence. For this contention he was ridiculed by Dr. Johnson, who, striking a stone with his foot, observed, "I refute it thus." In spite of a perhaps unnecessary subtlety, the bishop's sermons were animated by a sincere idealism and a fervent appeal to his crowded and fashionable congregation to care more for the things of the spirit than those of the body.

The Ideal of Social Service

Another philosopher who sought an escape at once from the harshness of creeds and the vagueness of the mystics was Auguste Comte (1798-1857), whose "religion of humanity" was founded upon the recognition of "positive" facts. Originally a student of mathematics, Comte (1529) was expelled from the French Polytechnic for his share in a students' rising. When he was twenty-six he had already thought out the main tenets of his philosophy. "Positivism" was accepted as a rational religion by many leading men of science, and still has its adherents. Its fundamental principle is that the ends of religion are best achieved by service to mankind.

From the thought of these pioneers sprang the ideas which are now so closely interwoven into our own that it is difficult to separate them. Thus, Comte was the first to apply the term "sociology" to that study of social science which, almost unheard-of in his day, is now part of the concern of every thinking and educated person.

Two Kinds of Knowledge

In the eighteenth century Germany produced a group of philosophers who deeply influenced modern thought. Immanuel Kant (1724-1804) established a new mode of critical inquiry into the nature of things, based upon the two kinds of knowledge possible to mankind, namely that derived from perception of the external world and that evolved from the intellect. He contended that the "ego" is able to acquire knowledge independently of experience, but that, on the other hand, the knowledge we derive from the senses is untrustworthy. Thus, the mind is never quite able to grasp "the thing in itself." In order to reconcile these different sources of knowledge Kant (1257) found it necessary to posit an "imperative instinct for good" in man which guides him towards moral truth, and prompts him to acts of reasonable self-denial.

Eighteenth-Century Idealism

Kant's philosophy prepared the way for the idealism which characterized eighteenth-century thought. It was further developed by Johann Gottlieb Fichte (1762-1814), who combined the metaphysical ingenuity of his master with deep religious feeling. To Fichte (1538) the Creator of the universe filled the gap in the Kantian philosophy, and he claimed that the purposes of the Supreme Being transcended our human conception. We must regard ourselves as humble manifestations of the Divine will, growing according to the instincts implanted within us.

Another German philosopher, Georg Friedrich Hegel (1770-1831), cleared up a good deal of the metaphysical muddle of this period (1544). He boldly asserted that mind and matter are one and the same thing. In contradistinction to the belief of Fichte, he claimed that "man's thought is the existence of God," and that human reason is capable of ordering human affairs for the best.

Unifying Thought and Reform

The idealism of the eighteenth-century philosophers produced its rich fruit in the social and humanitarian activities of the nineteenth and twentieth centuries. Once more, after a long period of doubt and confusion, men were beginning to regard the story of mankind as a process of gradual "becoming." Scientific activity was quickened, and the social fabric underwent drastic changes. It became necessary for mankind to think harder than ever in order to adjust means to ends, even to make existence supportable.

Next to the men who thought out the fundamentals of religion and morality were those who established enlightened principles of politics, education and social order. Hugo Grotius (1583-1645), a Dutch jurist, had founded international law towards the middle of the seventeenth century (1542). In England, Sir Samuel Romilly (1757-1818) succeeded in abolishing capital punishment except in cases of murder (1570), and Jeremy Bentham (1748-1832), seeking the ideal of "the greatest happiness of the greatest number," founded English philosophical radicalism (1520). Robert Owen (1771-1838) successfully opposed the child-labour which had been the worst blot on English industry for so many years (1563), and William Wilberforce (1759-1833) nobly devoted his life to the abolition of slavery (585). Pioneers of education during the period of idealism were Joseph Lancaster (1771-1838), who first conceived the idea of popular education in England (1551), and George Birkbeck

(1776-1841), who organized training centres for working men (1821).

The German August Froebel (1782-1852) perceived that education was really one continuous process, commencing from infancy (1839). His theories displaced the old system of rough-and-ready tuition. Benjamin Nicholas Appert (1797-1847) successfully pleaded for the education of French conscripts and convicts. John Henry Pestalozzi (1746-1827) founded the first industrial school in Switzerland (1865).

Indisputable Facts

Many other pioneers laboured in different fields, translating the thought of the master minds into action. Yet the story of thinking mankind is still in its early chapters. Humanity has slowly acquired a stock of ideas and a variety of points of view. Some of the ideas have not survived the test of experience, and the points of view are often difficult to reconcile. But as the human race becomes steadily more conscious of its powers a clearer and more unified purpose emerges.

Scientific knowledge largely aided this movement towards a more generalized certainty about human affairs. The discovery of many indisputable facts limited the "field" of argument and at the same time widened the sphere of speculation. Few people nowadays dispute the findings of the scientifically trained mind about the nature of the world we live in. What puzzled Heraclitus of Ephesus and Roger Bacon is now, to all intents and purposes, affirmed fact.

THE THEORY OF EVOLUTION

About the middle of the nineteenth century two great scientists, Charles Darwin (489) and Alfred Russel Wallace (489), jointly discovered certain facts about the origin of species which finally confirmed the rumours of an "evolutionary" process in all creation which had echoed down the ages from the earliest days of thought. Anaximander, it will be remembered had intuitions about evolutionary processes, and so had Lucretius (1754, 1757).

Darwin and Wallace were primarily biologists, concerned with the demonstration of their theories. But the idea of evolution as applied to human affairs strongly impressed itself upon the minds of the keenest thinkers of the nineteenth century. Thomas Henry Huxley (1825-95), versatile in research and profoundly sceptical of all speculation that could not be brought within the pale of science, took up the cudgels on behalf of Darwin, whose "Origin of Species" aroused a storm of controversy which its author was too timid to combat.

The New Trend of Thought

Huxley (173) set in action the whole trend of modern evolutionary thought. "All future philosophical and theological speculations," he declared, "will have to accommodate themselves to the doctrine of evolution." In his own books and lectures he applied relentless reasoning to a wide range of subjects. He was critical, rather than constructive, in his thought.

While the evolutionary theory rapidly gained ground it did not necessarily obliterate other schools of thought. Rationalism during the nineteenth century found its greatest exponent in John Stuart Mill (1806-73), who developed the utilitarian philosophy of Jeremy Bentham (1748-1832) (1520) to what may be described as its breaking-point, for Mill (1087) was actually less convinced of the sovereignty of reason than he admitted in his books. But Mill was a sound thinker, and his "Principles of Political Economy" is still a standard work upon this subject.

Evolution as a Philosophy

With the application of evolutionary doctrine to social existence, a task which was first undertaken by Herbert Spencer (1820-1903), began the chapter in the story of human thought which most interests us to-day, for it is the one in which we are participating.

Herbert Spencer (1576) belonged to a family long noted for independence of mind. He was very sickly in health, and it took him thirty-six years, frequently interrupted by breakdowns of an overtaxed brain, to complete his great work, "A System of Synthetic Philosophy." He saw evolution everywhere, as a universal process, a law ordering all life from the simplest organism to the most complex individual, from the most primitive civilization to the most advanced. This principle he had intuitively divined even before Darwin advanced his epoch-making theory, and it was Spencer who persuaded the great biologist to alter the phrase "natural selection" into "survival of the fittest," a more exact expression of the idea that lies behind the conception of evolution. With the fruits of scientific research to support him, Spencer proceeded to identify biological with social evolution:

The development of society, as well as the development of man and the development of life generally, may be described as a tendency to individuate—*to become a thing*. And, rightly interpreted, the manifold forms of progress going on around us are uniformly significant of this tendency.

Existence, in the Spencerian philosophy, is conceived as animated by one process, the production of an individual who adapts himself

to his environment and struggles to survive. The means which the human individual adopts in order to bring this about involves the various problems of religion, law and morals. All these, and their corollaries, Spencer considers in a relationship which naturally arises from his central, consistent conception of nature and history as a single process. This was the great reform which Spencer brought about in human thought; and although a good deal of his philosophy has since become discredited, its main thesis was undoubtedly the most important contribution to modern thought.

The Modern Progressive Movement

Evolution dominated the thought of the nineteenth century; it is as evident in the imaginative social idealism of Edward Bellamy (1853-98), the American reformer, as in the more practical application of it to the sphere of morals expressed in Henry Drummond's (1851-97) "Natural Law in the Spiritual World" (1933). It inspired all manner of reformations in existing social institutions and the growth of others. Once men had clearly grasped the significance of this general progressive movement in all living organisms, they saw that there was no limit to the progress of man. Reform and thought are now fused together in one urge towards the perfection of human institutions. Something more than "humanitarianism" inspires the curing of obvious social ills; a universal purpose animates all efforts to improve the physical and spiritual conditions of mankind.

"Creative Evolution"

This revolutionary movement, which aimed at building up new customs as it broke down old ones, found its expression in the work of Ferdinand Lassalle (1825-64), who, during an all too short lifetime terminated by an unlucky romance resulting in a duel, founded German social democracy (1851); in the prophecies of Karl Marx (1818-83) regarding the emancipation of the working classes (1856); in the brilliant psychological researches of Henri Bergson (b. 1859), whose philosophy of "creative evolution" revealed the soul of man as a conscious evolutionary agent (1920).

It does not follow, however, that because evolution has become so clearly established a principle in human thought, all modern thinkers and reformers are conscious evolutionists, nor even that the latter accept the evolutionary mode of inquiry. What we have come to achieve as a race of thinking individuals is a conception of a process of growth and development so vast that there is room in it for the free-play of every kind of activity.

In the nineteenth century there stood out certain reformers whose message and life-work would have remained the same had no theory of evolution been formulated. John Ruskin (1819-1900) advanced a new philosophy of the arts of painting and architecture, instilling into his readers a sense of the beautiful and an awareness of the value of aesthetic appreciation as a refining influence. Ruskin's lectures on political economy and social reform were informed by a truly progressive and Christian spirit (1341).

This same zeal for the improvement of economic and social conditions inspired George Jacob Holyoake (1817-1906) to found the co-operative movement in trade (1548), and Ebenezer Howard (b. 1850) to institute garden cities so that people might escape from the slums of crowded areas and enjoy the benefits of clean air and wholesome surroundings (1425).

The Campaign against Ignorance

The latest as well as the earliest reformers are concerned with the task of clearing up the muddle and confusion brought about through lack of thought. Ignorance, which Socrates condemned as the chief vice of mankind, led to the evil social conditions which aroused William Booth (1829-1912) to found the Salvation Army for the redemption of the thousands of wretches and unfortunates who nightly haunted the London streets in the early eighties of the last century (247).

Another great figure in the religious world at this period was John Clifford (1836-1923), a Baptist minister of extraordinary energy and intelligence, who devoted a long lifetime to the amelioration of social conditions and fought unwearingly for liberty of conscience (751).

Tolstoy's High Ideals

In Russia, Leo Tolstoy (1828-1910), a creator of literary masterpieces that rank with those of Homer, Dante and Shakespeare, taught a religion based on literal interpretation of the fundamental Biblical doctrines, and attempted to practise what he preached by leading the life of a simple peasant. Tolstoy (81), who was a great altruist rather than a reformer, set up an ideal of living beyond the attainment of normal humanity. His writings exerted a powerful influence upon European thought, and although Tolstoy the philosopher was less effective than Tolstoy the dreamer, there will always be an element of Tolstoyism in all idealistic thought.

Something both of the thinker and the reformer is in every scientist and inventor. But the great men mentioned in this section

stand by themselves as pioneers of the broad movements which led to the growth of all and every kind of human enterprise. Without Aristotle or Roger Bacon no practical advances could have been made in the sciences. Socrates and Plato blazed a trail which led to the more enlightened and better-substantiated thought of Huxley and Herbert Spencer.

Our Common Heritage

This thought is our common heritage. The man in the street has a share in it, and so has the school child. Education brings knowledge

and the best that has been thought in all ages within the grasp of all. But that knowledge and that thought, however elaborated and extended, sprang from the single-minded efforts of the great and lonely spirits who had no interest to serve save the good of mankind, and who felt within them an imperative need to create order out of chaos, to convert folly into wisdom and ignorance into knowledge.

But for them we should still be stumbling over problems which we now take in an easy stride. They saved us from thought and at the same time taught us how to think.

CHRONOLOGY OF THINKERS AND REFORMERS

EARLY THINKERS

<i>Name</i>	<i>Place</i>	<i>Date</i>	<i>Contribution</i>
THALES	Miletus (Ionia) Greece	B.C. 600	Founded first school of philosophical inquiry into the nature of things; believed water to be the "primary substance."
ANAXIMANDED	Greece	570	Thought all things sprang from an "Infinite" or "Boundless," and believed in a round earth.
ANAXIMENES	Greece	500	Believed "primary substance" to be air.
PYTHAGORAS	Samos	500	Mathematician and astronomer. Formulated theory of numbers, leading to discovery of musical laws.
XENOPHANES	Colophon	500	Founder of the Eleatic School; metaphysical theories.
HERACLITUS	Ephesus	500	Master-thinker of the Eleatic School; thought life a process of continual change, fed by an "ever-living fire."
EMPEDOCLES	Agrigentum (Sicily)	450	Divided the elements into "Fire," "Air," "Earth," and "Water."
ANAXAGORAS	Clazomenæ (Greece)	450	Anticipated atomic theory; believed in a universal mind, or "nous."
DEMOCRITUS	Abdera (Greece)	460	Developed atomic theory.
SOCRATES	Athens	d. 309	Established the "question and answer" system of philosophical inquiry.
PLATO	Athens	427-345	Disciple of Socrates, whose wisdom he embodied in The Dialogues; formulated theory of ideas.
ARISTOTLE	Stagira (Macedonia)	384-322	Master thinker of the ancient world; established laws of science, art, and morals.
EPICURUS	Samos	300	Philosophy of pleasure compatible with virtue.
ZENO	Citium	300	Stoic school: indifference to pleasure or pain.
CHRYSIPPUS	Greece	280-207	
EUCLID	Greece	3rd century	Master of exact reasoning.
PROTAGORAS	Greece	5th century	Sophists: men of culture who taught for gain.
GORGIAS	Greece	5th century	First anthropologist; observed "evolutionary" processes.
LUCRETIUS	Rome	1st century	
CONFUCIUS	China	551-478	Reformer of manners and morals.
LAO TSE	China	6th century	Sage and mystic; preached virtues of humility and returning good for evil.

Black figures denote dates where further information is given

Chronology of Thinkers and Reformers (*contd.*)

FOUNDERS OF RELIGIONS

JESUS CHRIST	Judea	1st century A.D.	Founder of Christianity.
MOHAMMED	Mecca	7th century A.D.	Founder of Mohammedanism, or the Faith of Islam.

THINKERS AND REFORMERS OF THE MIDDLE AGES

		A.D.	
AUGUSTINE	Rome	354	Early Father of the Church. Attempted to restore the works of Aristotle.
THE VENERABLE BEDE	England	672-735	Translated the Gospel of St. John.
ALCUIN	England	735-804	Founded university education.
THOMAS AQUINAS	Naples	1227-1274	Attempted to reconcile religion and philosophy.
DUNS SCOTUS	England	1265-1308	"The Subtle Doctor"—ingenious theological argument.
ALBERTUS MAGNUS	Cologne	d. 1280	Theologian and student of Aristotle. First mediæval philosopher to accept idea of a spherical world.
RAYMOND LULLY	Spain	1234-1315	Great scholar and theological dialectician.
ROGER BACON	England	1214?-92	Greatest independent thinker of the Middle Ages—founder of modern spirit of scientific inquiry.
JOHN WYCLIFFE	England	1320?-84	Religious reformer—promoted first English version of the Bible.
JOHN HUSS	Bohemia	1373-1415	Religious reformer and spiritual teacher—suffered martyrdom for his resistance to dogma.

THINKERS AND REFORMERS OF THE REFORMATION AND RENAISSANCE PERIOD

COSIMO DE' MEDICI	Italy	1389-1464	} Patrons of learning and enterprise.
LORENZO THE MAGNIFICENT	Italy	1448-92	
GIOVANNI DE' MEDICI	Italy	1475-1521	} Restored Platonic philosophy.
MARSILIO FICINO	Italy	1433-99	
POLITIAN	Italy	1454-94	} Educational reformer. ("The Schoolmaster of Germany.")
JAKOB WIMPELING	Germany	1450-1325	
THOMAS LINACRE	England	1460?-1524	} Educational reformers.
WILLIAM GROCYN	England	1446-1519	
JOHN COLET	England	1467-1519	} Founded St. Paul's Grammar School.
GIROLAMO SAVONAROLA	Italy	1452-98	
ERASMUS	Germany	1466-1536	} Inspired Reformation of the Church.
MARTIN LUTHER	Germany	1483-1546	
WILLIAM TYNDALE	England	1492?-1536	} Translators of the Bible.
MILES COVERDALE	England	1488?-1568	
GREGORY MARTIN	England	1540?-82	} Disciple of Luther.
ULRICH ZWINGLI	Switzerland	1484-1531	
JEAN CALVIN	Switzerland	1509-64	} Theologian of the reformed religion.
JOHN KNOX	Scotland	1505-72	
SIR THOMAS MORE	England	1478-1535	} Leader of the Protestant movement in Scotland.
FRANCIS BACON	England	1561-1626	
NICOLÒ MACHIAVELLI	Italy	1469-1527	} Utopian idealist—author of "Utopia."
JOHANN AMOS KOMENSKÝ (COMENIUS)	Moravia	1592-1671	
GIORDANO BRUNO	Italy	1548-1600	} Founder of political science.
RENÉ DESCARTES	France	1596-1650	
BENEDICT SPINOZA	Holland	1632-77	} Educational reformer—introduced Nature Study.
			} Scientific freethinker.
			} Champion of reason.
			} Pantheistic philosopher.

Black figures denote pages where further information is given

Chronology of Thinkers and Reformers (*contd.*)

THINKERS AND REFORMERS OF THE EIGHTEENTH CENTURY

<i>Name</i>	<i>Place</i>	<i>Date</i>	<i>Contribution</i>
JOHN LOCKE	England	1632-1704	Pioneer of toleration.
FRANÇOIS MARIE AROUET (VOLTAIRE)	France	1694-1778	Reformer of thought and champion of freedom.
JEAN JACQUES ROUSSEAU ..	France	1712-78	Advanced "return to Nature" philosophy, and championed rights of the people.
GEORGE FOX	England	1624-90	Founded Society of Friends, or Quakers.
JOHN WESLEY	England	1703-91	Founded Methodism.
BISHOP BERKELEY	England	1685-1753	Anti-materialistic philosopher.
AUGUSTE COMTE	England	1798-1857	Founder of Positivism — religion of social service.
FRIEDRICH AUGUST FROEBEL	Germany	1782-1852	Educational reformer.
IMMANUEL KANT	Germany	1724-1804	Established new critical inquiry into the nature of things.
JOHANN GOTTLIEB FICHTE ..	Germany	1762-1814	Idealist philosopher.
GEORG FRIEDRICH HEGEL ..	Germany	1770-1831	Evolutionist philosopher.
BENJAMIN NICOLAS APPERT..	France	1797-1847	Established education for conscripts and convicts.
ANDREW BELL	England	1753-1832	Founded day schools.
GEORGE BIRKBECK	England	1776-1841	Inspirer of popular education.
SIR SAMUEL ROMILLY ..	England	1757-1818	Abolished capital punishment except in cases of murder.
JEREMY BENTHAM	England	1748-1832	Founded English philosophic radicalism.
ROBERT OWEN	England	1771-1858	Opposed child labour in factories.
WILLIAM WILBERFORCE ..	England	1759-1833	Introduced anti-slavery legislation.
JOSEPH LANCASTER	England	1778-1838	Pioneer of popular education.
JOHANN HEINRICH PESTALOZZI	Switzerland	1746-1827	Pioneer of industrial schools.

THINKERS AND REFORMERS OF THE NINETEENTH AND TWENTIETH CENTURIES

THOMAS HENRY HUXLEY ..	England	1825-95	Inspirer of modern evolutionary philosophy.
JOHN STUART MILL	England	1806-73	Established principles of political economy.
LORD SHAFTESBURY	England	1801-85	Reformer of child-life.
HERBERT SPENCER	England	1820-1903	Master-mind of modern evolutionary philosophy.
EDWARD BELLAMY	America	1853-98	Social idealist.
FERDINAND LASSALLE ..	Germany	1825-64	Founder of German social democracy.
KARL MARX	Germany	1818-83	Founder of International Working Men's Association, and prophet of social revolution.
JOHN RUSKIN	England	1819-1900	Critic of the arts and social reformer.
GEORGE JACOB HOLYOAKE ..	England	1817-1906	Founded Co-operative movement in trade.
EBENEZER HOWARD	England	b. 1850	Pioneer of Garden City movement.
LEO TOLSTOY	Russia	1828-1910	Great altruist and reformer.
JOSEPH MAZZINI	Italy	1805-72	Political idealist.
JOHN CLIFFORD	England	1836-1923	Religious reformer.
HENRI BERGSON	France	b. 1859	Psychologist—"Creative Evolution."
SIR ROWLAND HILL	England	1795-1879	Reformer of postal service.
WILLIAM BOOTH	England	1829-1912	Founder of Salvation Army.
JOHN BRIGHT	England	1811-89	} Brought about repeal of Corn Laws.
RICHARD CORDEN	England	1804-65	
ELIE METCHNIKOFF	Russia	1845-1916	Discovered means of prolonging life.
SIDNEY WEBB	England	b. 1859	Founded London School of Economics
SIR ARTHUR PEARSON ..	England	1866-1922	Founded institution for training blinded soldiers.
ALBERT EINSTEIN	Germany	b. 1879	Formulated theory of relativity.

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- Life and Evolution** F. W. Headley
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